

2020 **PHYSICAL THERAPY** WORKFORCE REPORT



Missouri Physical Therapy Workforce Report

By the University of Missouri Center for Health Policy;
School of Medicine Office of Rural Health; and
Missouri State Board of Registration for the Healing Arts

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Executive Summary

The following report describes the physical therapy workforce in Missouri, based on data from two sources: 1) The Missouri State Board of Registration for the Healing Arts Physical Therapist/Physical Therapist Assistant License Renewals (PT/PTA Registry) and 2) The U.S. Health Resources and Services Administration (HRSA) Physical Therapist/Physical Therapist Assistant Workforce Survey (PT/PTA Survey).

- **The PT/PTA Registry** includes all PTs (N=6,272) and PTAs (N=2,926) licensed in Missouri in 2020.
 - License renewals were received from PTs from 105 of Missouri's 114 counties and the independent City of St. Louis.
 - License renewals were received from PTAs in 112 of Missouri's 114 counties and the independent City of St. Louis.
- **The PT/PTA Survey**, which was promoted to all licensed PTs and PTAs in conjunction with the 2020 license renewal process, included valid responses from 1,131 PTs (18.0% response rate) and 538 PTAs (18.4% response rate).
 - To understand the representativeness of the PT/PTA Survey convenience sample, comparisons are made with the PT/PTA Registry on license type, gender, and geographic location. No response bias was found based on these characteristics.
 - Although surveys were received from PTs and PTAs across the state, 51 counties had no PT survey respondents and 50 counties had no PTA survey respondents.
 - As more Missouri PTs and PTAs complete the annual survey, more robust data, including geographical differences, will be included in future editions of the report.

Highlights from the Data

Geographic Distribution

- In general, rural counties in Missouri have lower rates of PTs per 10,000 residents than their metropolitan and micropolitan counterparts (Figure 6).
- Many counties with low population density, especially in the northern and southeastern part of the state had higher rates of PTAs per 10,000 residents than other more population-dense counties (Figure 7).

Age and Gender Distribution

- Over half of all licensed PTs and PTAs in Missouri are younger than 45, with the most common age bracket being under 35 (Figures 8 & 9).
- Women comprise three-quarters of all PTs/PTAs licensed in Missouri, including 74.7% of PTs and 75.8% of PTAs (Figure 3).

Race and Ethnicity

- The majority of survey respondents selected White as their only race category, which represents 92.4% of PTs and 93.6% of PTAs. According to the Census Bureau, 82.9% of Missourians are White alone and 11.8% are Black or African American alone.
- A small number of PTs/PTA survey respondents in Missouri identify as Hispanic or Latinx, including 1.3% of PTs and 2.2% of PTAs. By comparison, 4.4% of Missourians are Hispanic or Latinx.

Education

- While just under half of PT survey respondents obtained a Doctor of Physical Therapy (DPT) as their highest degree (Figure 13), the vast majority (98.3%) of PTs receiving their highest degree between 2010 – 2019 earned a DPT (Figure 15).
 - Education and licensing requirements for physical therapists have recently changed. New entrants into the physical therapist workforce require the Doctor of Physical Therapy degree as their entry-level degree.
- Most PTAs who answered the survey (95.2%) entered the field with an Associate degree (Figure 28).

Employment

- Among the 92.2% of PTs who are employed (Figure 18), 76.0% are working at least 31 hours per week (Figure 20), primarily in direct patient care (Figure 21).
- Among the 89.0% of PTAs who are employed (Figure 31), 71.2% are working at least 31 hours per week (Figure 20), primarily in direct patient care (Figure 21).

Practice Setting

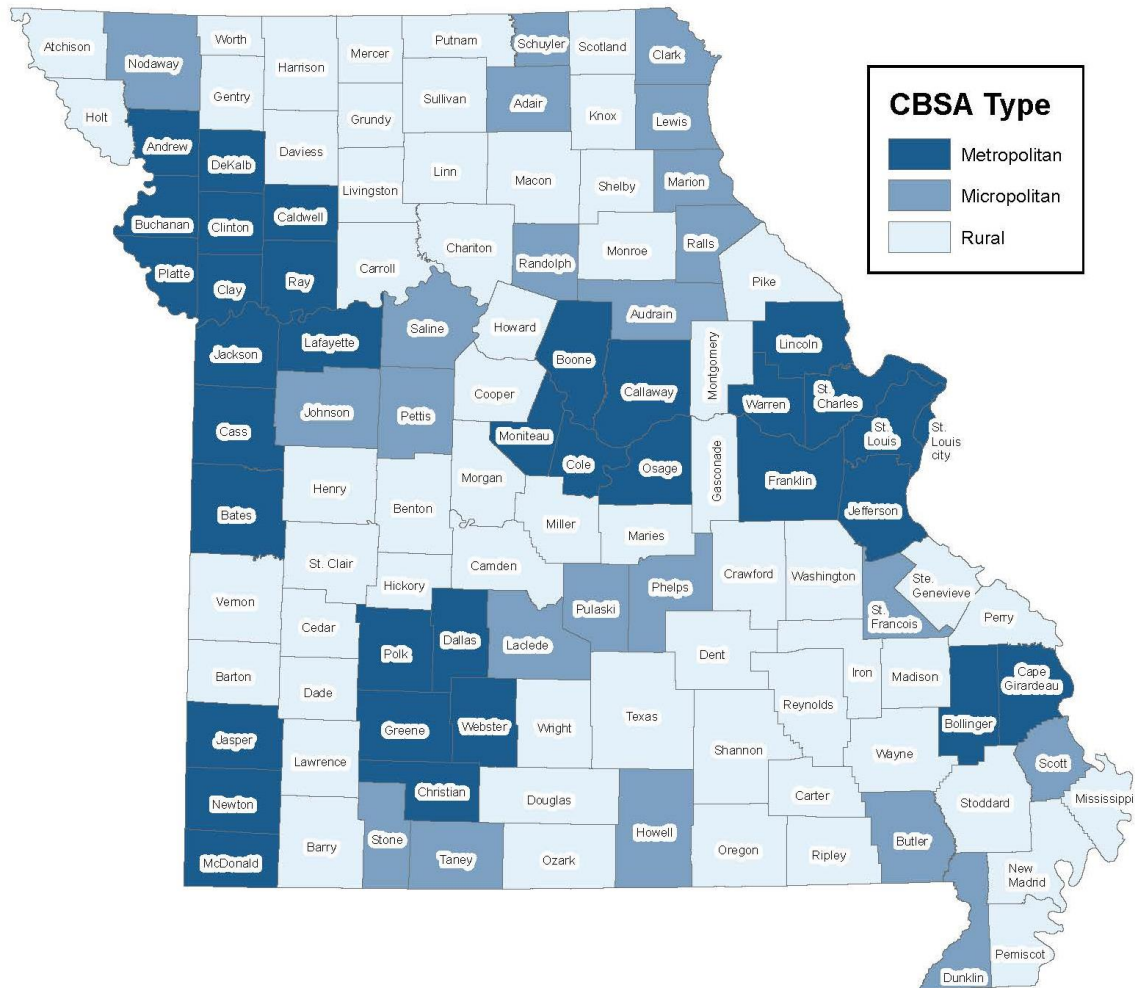
- PTs who answered the survey worked most often in outpatient clinics, especially those affiliated with a hospital, health system, military, or other government agency (Figure 23).
- PTAs who answered the survey worked most often worked in the response category that included skilled nursing facility, long term care facility, assistive living facility or group home (Figure 36).
- A small proportion of PTs (10.6%) and even fewer PTAs (2.6%) reported having conducted work through telehealth or telemedicine (Figures 24 & 37); however, rates were higher for both professions on surveys submitted after the onset of the COVID-19 pandemic (Figures 25 & 38).

Patient Characteristics and Practice Specialties

- When asked to select the age range(s) of the populations they work with in their clinical practice/work settings both PTs (77.6%) and PTAs (89.7%) most commonly selected patients who are 65 and older (Figures 26 and 39).
- When asked to indicate which injuries or conditions they most frequently treated, the most commonly selected categories by both PTs and PTAs were “orthopedic or sports” and “neurologic” (Figures 27 & 40).

Figure 1. Reference Map – Missouri Population by CBSA Type

Missouri Counties by CBSA Type



Created by the Missouri Spatial Data Information Service for the Center for Health Policy
Data source: American Community Survey 2013-2017
14 October 2020

Introduction

The Health Care Workforce Project, housed at the University of Missouri (MU) Center for Health Policy, conducts analyses of Missouri's health care workforce to support policymakers in health care, government, and training programs, with the goal of improving access and quality of health services for all Missourians. Appropriate planning and assessment of health professional needs are dependent upon the availability of accurate, timely, and reliable data. The Project serves as a data warehouse and analytic clearinghouse, providing stakeholders the information necessary to address the shortages and maldistribution of health care professionals, and is used for planning by policy makers, health systems, researchers, and higher education institutions to determine supply and demand of health professionals statewide.

The goals of the Health Care Workforce Project are to:

- Monitor longitudinal trends in supply and distribution of health care professionals,
- Inform health care workforce policy makers and advocacy organizations,
- Inform training programs that will determine quantity and distribution of health care professionals, and
- Identify emerging health care workforce issues.

The following report explores the workforce patterns of Missouri's Physical Therapists (PAs) and Physical Therapist Assistants (PTAs). Specifically, the goal is to better understand the demographic makeup and geographic distribution of PTs and PTAs, their educational backgrounds, specializations, and the populations that they serve.

Physical Therapists

Physical therapists (PTs), are "movement experts who improve the quality of life of individuals with functional problems through prescribed exercise, hands-on care, and patient education."¹ PTs work in a variety of settings, treating individuals of all ages, from newborns to geriatrics. Physical therapists also care for people who want to prevent future problems and live a healthy, active lifestyle. A PT will examine each individual and help them develop a treatment plan to reach their health and movement goals.

PTs work as part of a healthcare team, overseeing the work of physical therapist assistants and aides, and consulting with physicians and surgeons and other specialists. In Missouri, a patient needs a referral from a physician in order to receive most services from a PT.

PTs must have a state license to practice physical therapy. Some physical therapists may choose to become a certified specialist in one of ten areas (e.g., pediatrics, sports), but it is not required. The laws and rules of the state of Missouri determine the PT scope of practice, providing the legal description of what a PT can do.

¹ American Physical Therapy Association. (n.d.a). *What physical therapists do*. Retrieved from <https://www.apta.org/your-career/careers-in-physical-therapy/becoming-a-pt>.

Physical Therapist Assistants

Physical therapist assistants (PTAs), work under the direction and supervision of physical therapists. PTAs are licensed healthcare workers involved in the direct care of patients. “PTAs implement components of patient care, obtain data related to the treatments provided, and collaborate with the PT to modify care as necessary.”² PTAs record patients’ progress and report the results of each treatment to the PT. The laws and rules of the state of Missouri determine the PTA scope of work, or the legal description of what a PTA can do.

Summary of Methods

The data in the report are from two sources: Missouri State Board of Registration for the Healing Arts Physical Therapist/Physical Therapist Assistant License Renewals and the U.S. Health Resources and Services Administration (HRSA) Physical Therapist/Physical Therapist Assistant Workforce Survey.

Data collected through the Professional Registration, abbreviated as “PT/PTA Registry” throughout the report, includes all physical therapists (n=6,272) and physical therapist assistants (n=2,926) licensed in Missouri for 2020.

The HRSA Physical Therapist/Physical Therapist Assistant Minimum Data Set Survey was adopted from the U.S. Health Resources and Services Administration Bureau of Health Workforce (<https://bhw.hrsa.gov/>). The HRSA Physical Therapist/Physical Therapist Assistant Workforce Survey, abbreviated as “PT/PTA Survey” in this report, was developed in cooperation with the Federation of State Boards of Physical Therapy, American Physical Therapy Association and HRSA to encourage consistent, standardized reporting of demographic, educational, credentialing and practice characteristics for the healthcare workforce in the U.S.

Survey Distribution and Response

The PT/PTA Survey was launched in conjunction with the 2020 license renewal process, which began on November 21, 2019. A link to the survey was posted on the Missouri State Board of Registration for the Healing Arts (BoHA) Physical Therapist/Physical Therapist Assistant website (<https://pr.mo.gov/physicaltherapists.asp>) and was promoted through a variety of key contacts, including the Rural Physician Network, the Health System Administrator Network, and the Missouri Area Health Education Centers. In addition to a postcard invitation, the BoHA sent email reminders to Missouri PTs and PTAs on January 27, February 21, and May 26, 2020. The survey closed on September 21, 2020.

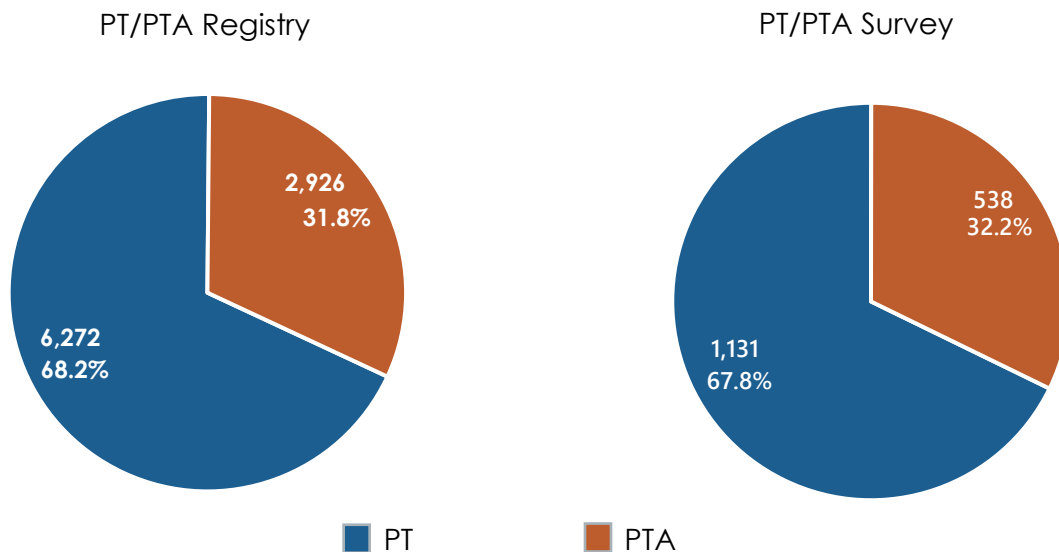
² American Physical Therapy Association. (n.d.b). *What do physical therapy assistants do*. Retrieved from <https://www.apta.org/your-career/careers-in-physical-therapy/becoming-a-pta>.

A total of 1,704 PTs/PTAs responded to the survey, with a response rate of 18.5%. Respondents who did not progress beyond the demographic section of the survey were removed from the analysis, resulting in 1,669 cases and a valid response rate of 18.1%. Included in the valid responses are 1,131 PTs (18.0%) and 538 PTAs (18.4%).

Key elements of PT/PTA Survey data are compared with PT/PTA Registry data in order to determine the representativeness of the survey sample, including license, gender distribution, and geographical distribution.

Of the total population of PTs/PTAs registered in Missouri (n=9,198), 68.2% are PTs and 31.8% are PTAs. The proportion of survey respondents who were PTs and PTAs closely resembled the overall makeup of the population (Figure 2).

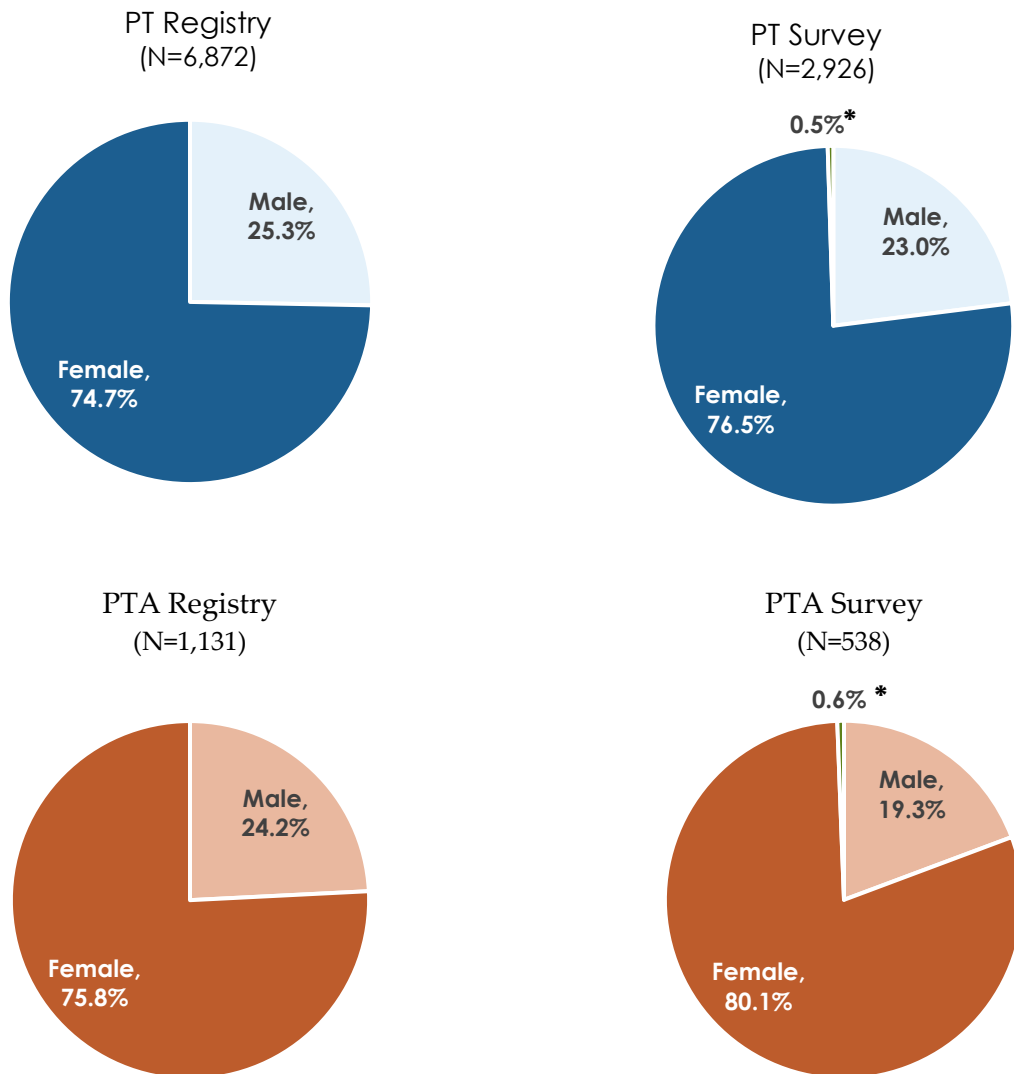
Figure 2. License Type of PT/PTA Registrants and Survey Respondents



Note: Five individuals responding to the PT/PTA Survey selected holding both a PT and a PTA license. These respondents with dual-licensure were grouped with the PTs in Figure 2 and throughout the remainder of the report.

Women comprise three-quarters of all PTs/PTAs licensed in Missouri, including 74.7% of PTs and 75.8% of PTAs; the gender of survey respondents closely reflects this distribution. Respondents who identify as female are slightly over-represented in the PTA Survey, but the difference from the PT/PTA Registry is small, with a less than 5% deviation from the population of registered PTAs (Figure 3).

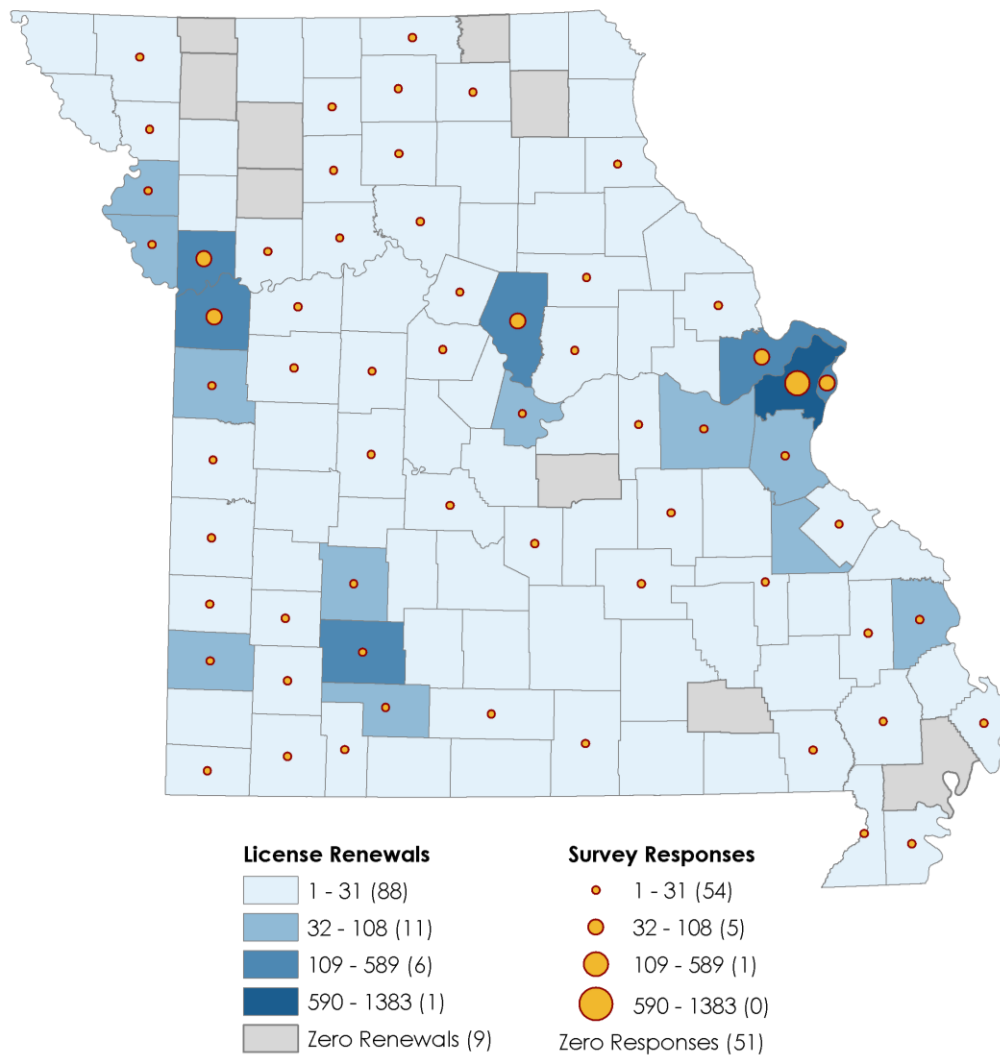
Figure 3. Gender of PT/PTA Registrants and Survey Respondents



*In addition to the response options of "male" and "female" provided on the PT/PTA Registry, the PT/PTA survey included the options "prefer to self-describe" and "prefer not to answer." Six PTs (0.5%) and 3 PTAs (0.6%) selected one of these two additional options.

Figure 4 shows the number ranges for PT Registrants and PT Survey respondents at the county level. License renewals were received from PTs from 105 of Missouri's 114 counties and the independent City of St. Louis. Although surveys were received from PTs across the state, 51 counties had no survey respondents.

Figure 4. Map of PT License Renewals and Survey Respondents
Survey Response and License Renewals
for Physical Therapists



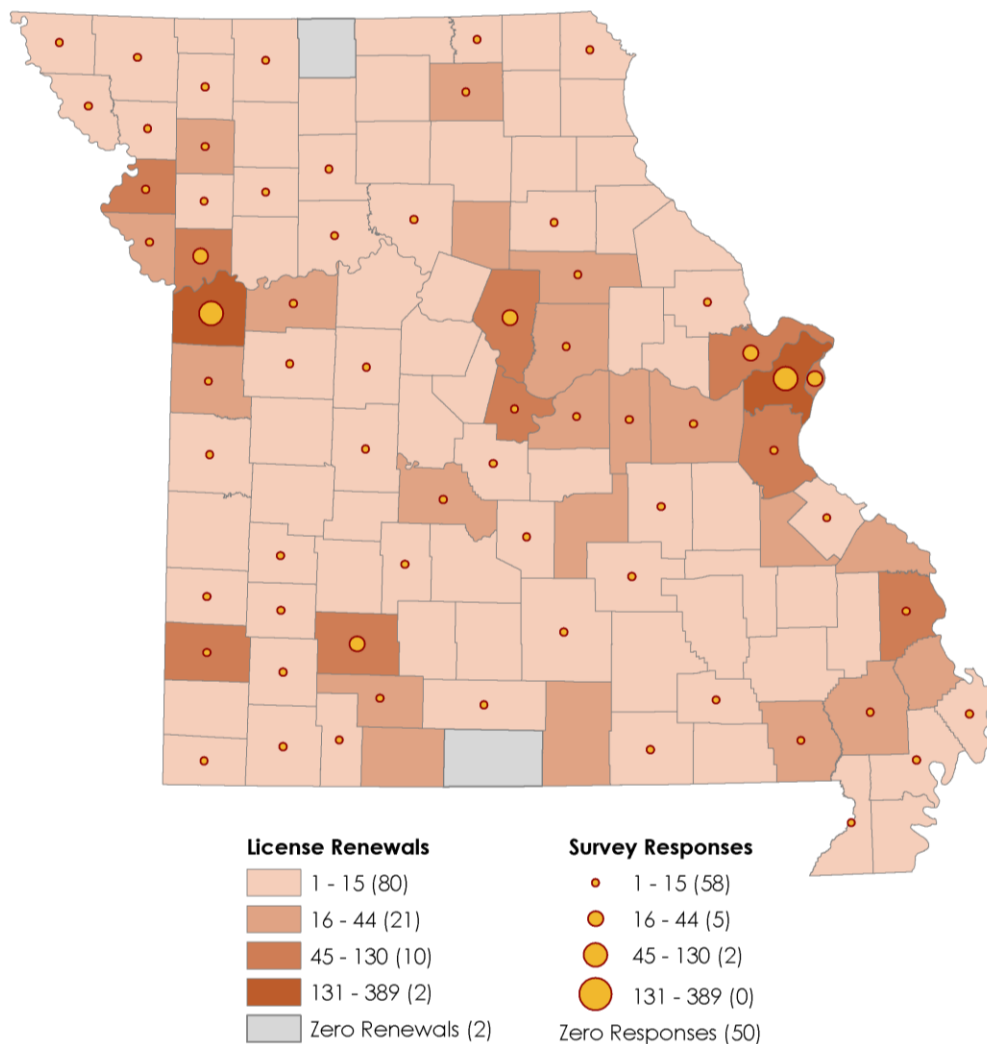
Source: Physical Therapist Qualtrics Survey (9/2020); Missouri Division of Professional Registration (9/2020)
 Created by: Center for Health Policy (CHP), University of Missouri

Note: PT license renewal data include either business or home county; 42% of PT registrants reported their home address; the map includes whichever location was chosen. PT licensees with out-of-state or unknown addresses (n=1,252) are not included in the map. PT Survey location is the ZIP code of the PT's primary work location.

Although there are fewer PTAs than PTs registered in Missouri, they are more dispersed across the state, particularly in the rural areas. License renewals were received from PTAs in 112 of Missouri's 114 counties and the independent City of St. Louis (Figure 5); fifty of these counties had no survey respondents.

Figure 5. Map of PTA License Renewals and Survey Respondents

Survey Response and License Renewals for Physical Therapist Assistants



Source: Physical Therapist Qualtrics Survey (9/2020); Missouri Division of Professional Registration (9/2020)
Created by: Center for Health Policy (CHP), University of Missouri

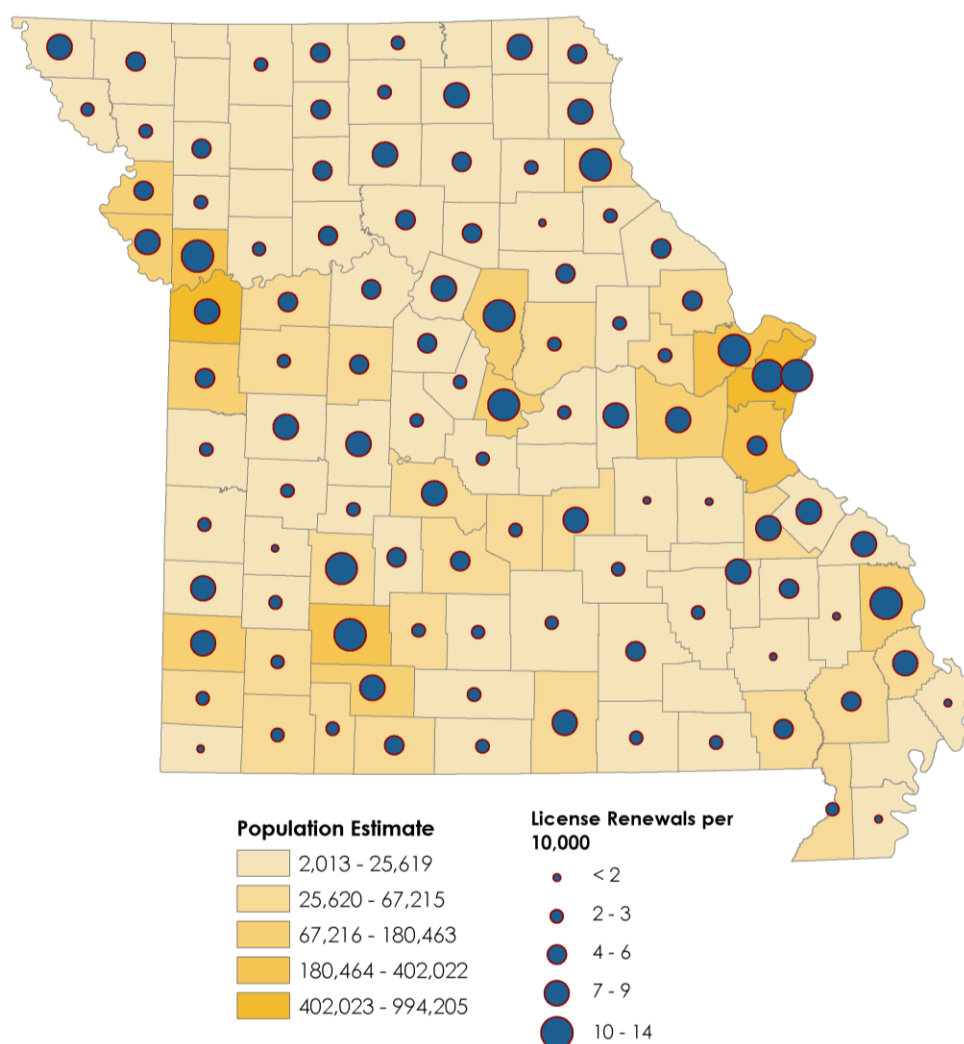
Note: PTA license renewal data include either business or home county; 57% of PTAs reported their home address. PTA licensees with out-of-state or unknown addresses (n=459) are not included in the map. PTA Survey location is the ZIP code of the PTA's primary work location.

Characteristics of the Physical Therapy Workforce

Geographic Distribution

In general, rural counties in Missouri have lower rates of PTs per 10,000 residents than their metropolitan and micropolitan counterparts (Figure 6). All nine counties without registered PTs (i.e., Caldwell, Carter, Daviess, Gentry, Knox, Maries, New Madrid, Schuyler, and Worth) fall into the lowest population range.

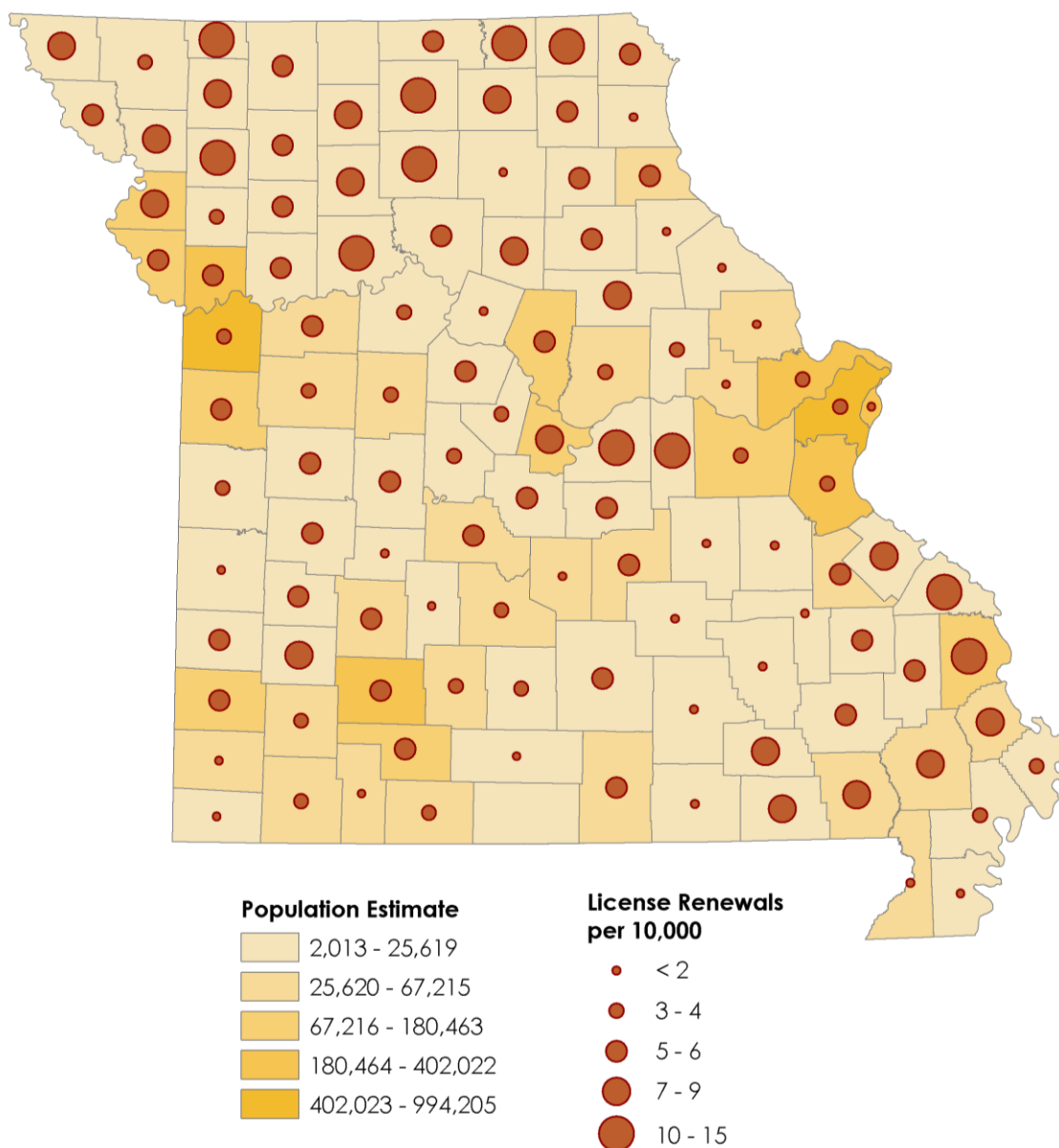
Figure 6. Map of PT License Renewals by Population
License Renewals per 10,000 Population
for Physical Therapists



Source: Missouri Census Data Center (7/2019); Missouri Division of Professional Registration (9/2020)
Created by: Center for Health Policy (CHP), University of Missouri

PTA license renewals came from all but two counties in Missouri: Mercer and Ozark. As Figure 7 shows, many counties with low population density, especially in northern and southeastern Missouri, had higher rates of PTAs than more population-dense counties.

Figure 7. Map of PTA License Renewals by Population
License Renewals per 10,000 Population
for Physical Therapist Assistants



Source: Missouri Census Data Center (7/2019); Missouri Division of Professional Registration (9/2020)
 Created by: Center for Health Policy (CHP), University of Missouri

Age and Gender Distribution

The age distributions of PTs and PTAs are quite similar: the median age for PTs is 42 and 41 for PTAs. Over half of all licensed PTs and PTAs in Missouri are younger than 45, with the most common age bracket being under 35 (Figures 8 & 9). The skew toward younger age brackets coincides with growth in demand for physical therapy. According to the Bureau of Labor statistics, employment in physical therapy is expected to grow, partly driven by an aging and active baby boomer generation. From 2019 to 2020, employment of PTs is expected to grow 18%³ and employment of PTAs is expected to grow 29%.⁴

Figure 8. Age Distribution of Missouri PT Registrants

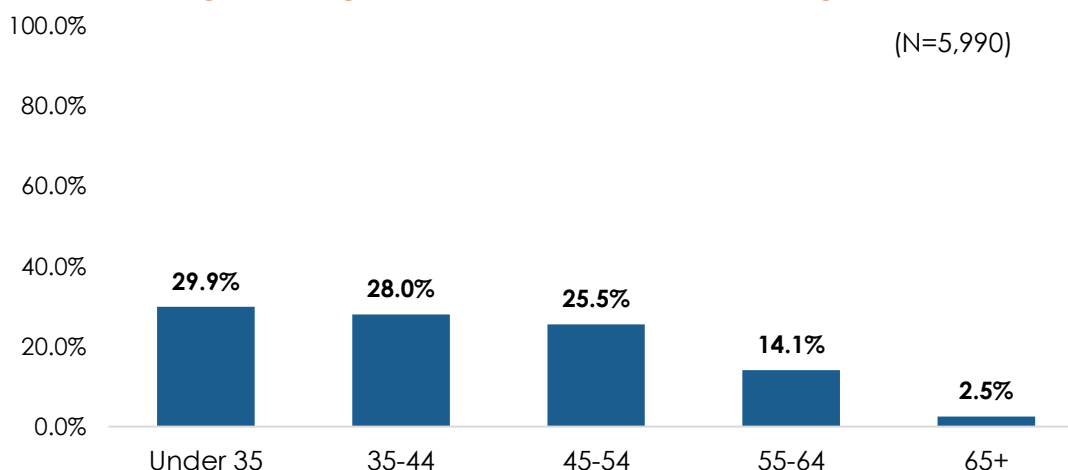
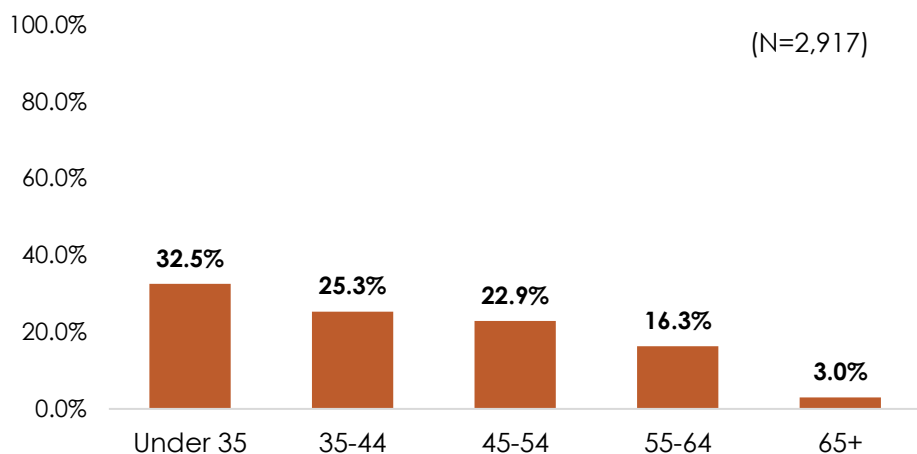


Figure 9. Age Distribution of Missouri PTA Registrants

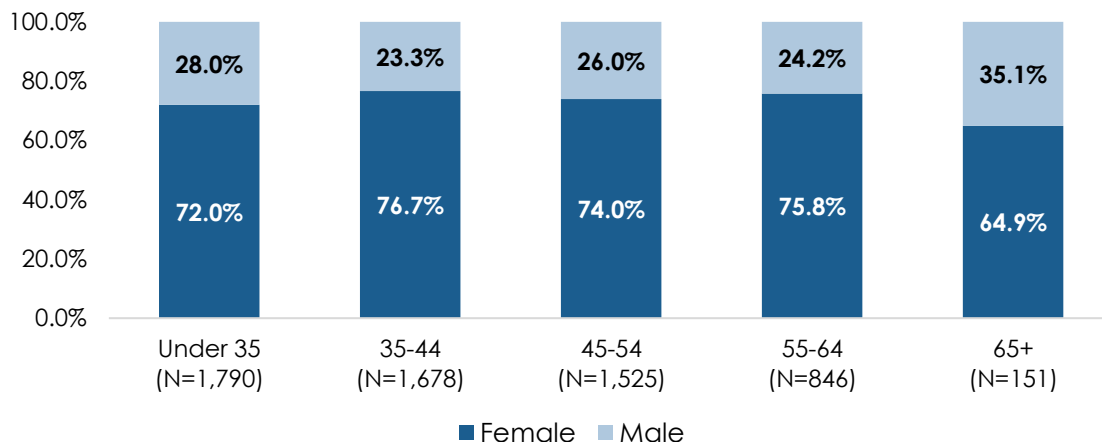


³ Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Physical Therapists, retrieved from: <https://www.bls.gov/ooh/healthcare/physical-therapists.htm>.

⁴ Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Physical Therapist Assistants and Aides, retrieved from: <https://www.bls.gov/ooh/healthcare/physical-therapist-assistants-and-aides.htm>.

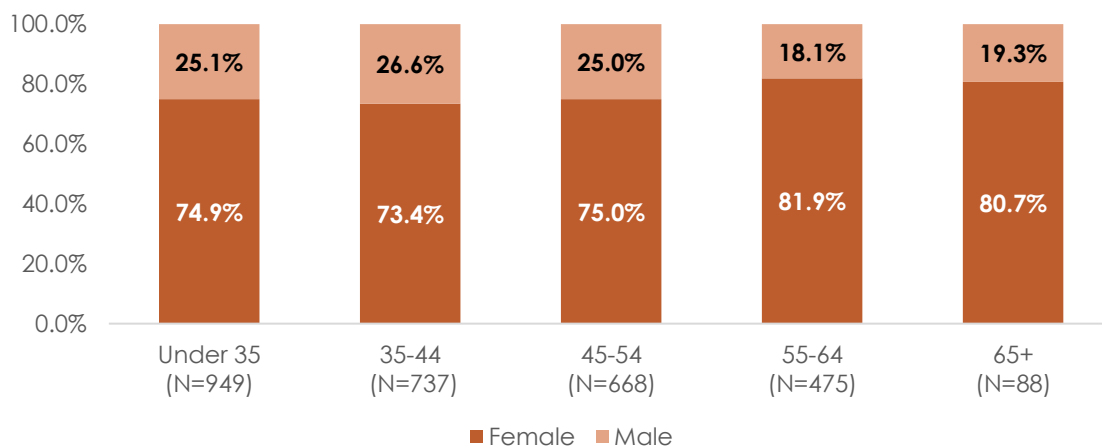
In addition to being a field with many young practitioners, physical therapy is also female-dominated. Although most PTs across all age categories identify as female, over one-third of PTs identify as male in the oldest age bracket (65+) (Figure 10).

Figure 10. Gender of Missouri PT Registrants Across Age Brackets



The predominance of practitioners who identify as female is particularly pronounced among PTAs who are 55 or older (Figure 11).

Figure 11. Gender of Missouri PTA Registrants Across Age Brackets



Race and Ethnicity

PTs and PTAs were not asked about their race or ethnicity in the license renewal process; as such, the following description of racial and ethnic diversity is based on responses collected through the PT/PTA Survey. The PT/PTA survey collected data on race and ethnicity in accordance with U.S. Census standards, which allow respondents to report multiple races and report their ethnicity as a separate category from race. Race categories include Black or African-American, American Indian or Alaska Native, Asian, Native Hawaiian or Pacific Islander, White, and Other.

The majority of survey respondents selected White as their only race category, which represents 92.4% of PTs and 93.6% of PTAs. According to the 2019 population estimates from the US Census Bureau, the most commonly reported racial identities in Missouri are White alone (82.9%) and Black or African American alone (11.8%)⁵; yet, Black or African American alone was selected by only 1.1% of PTs and 2.8% of PTAs. While the possibility of nonresponse bias based on race cannot be discounted, the data suggest a lack of representation among PTs and PTAs in Missouri among those who identify as Black or African American alone.

Ethnicity is used on the PT/PTA Survey to distinguish individuals who identify as Hispanic or Latinx from those who do not. A small number of PTs/PTAs in Missouri who answered the survey identify as Hispanic or Latinx, including 1.3% of PTs and 2.2% of PTAs. According to 2019 Population Estimates from the US Census Bureau, 4.4% of Missourians are Hispanic or Latinx, suggesting an underrepresentation of PTs and PTAs in Missouri who identify as Hispanic or Latinx.

⁵ U.S. Census Bureau (2019). QuickFacts: Missouri. Retrieved from <https://www.census.gov/quickfacts/MO>.

Survey Results for Physical Therapists

Education

PTs were asked to report both their entry-level and their highest degree. In Missouri, a PT may have graduated with a certificate, a Bachelor's Degree, a Master's Degree, or a Doctor of Physical Therapy (DPT) degree as their entry level degree depending on when they entered the PT workforce. New entrants into the physical therapist workforce require the Doctor of Physical Therapy degree as their entry-level degree, which prepares students to take the National Physical Therapy Examination and become licensed.⁶ Although Doctor of Physical Therapy was the most commonly reported entry degree among PT survey respondents, it was held by fewer than half (Figure 12). Twelve percent of PTs went on to obtain additional degrees in physical therapy. A comparison of entry-level degrees (Figure 12) with highest level degrees (Figure 13) shows that the largest increase was in the percentage of PTs earning a Doctor of Physical Therapy degree.

Figure 12. PTs: Entry-Level Degree

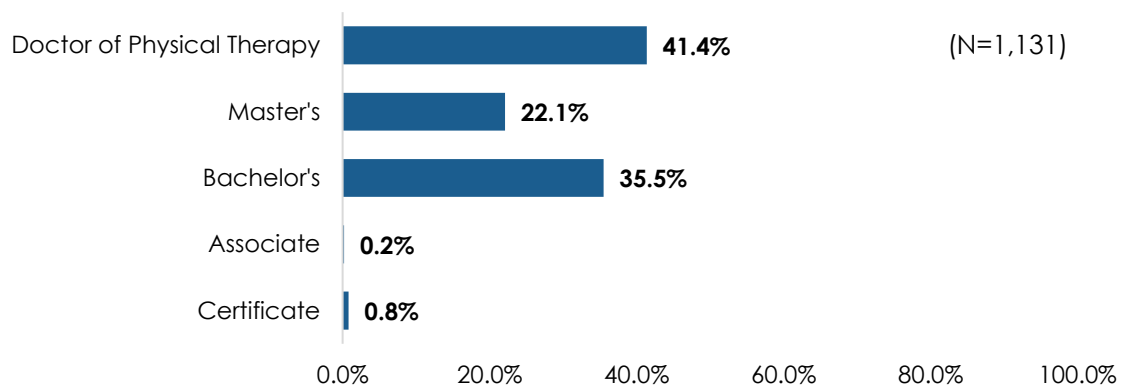
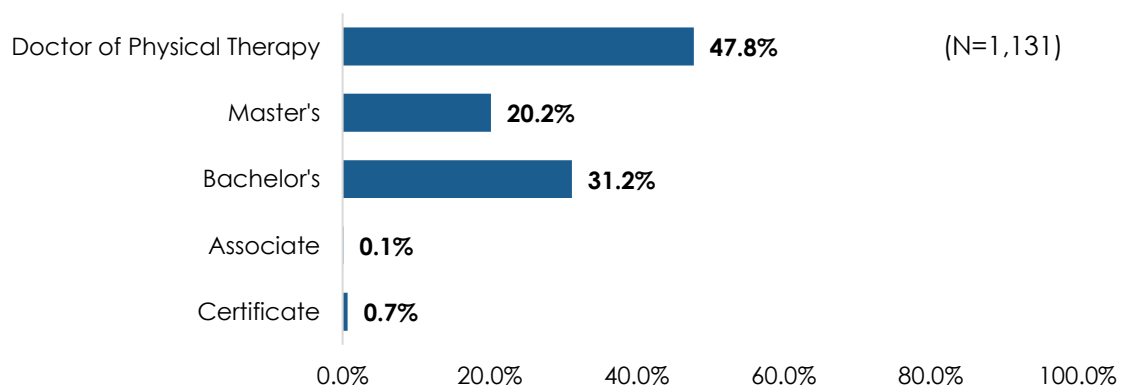


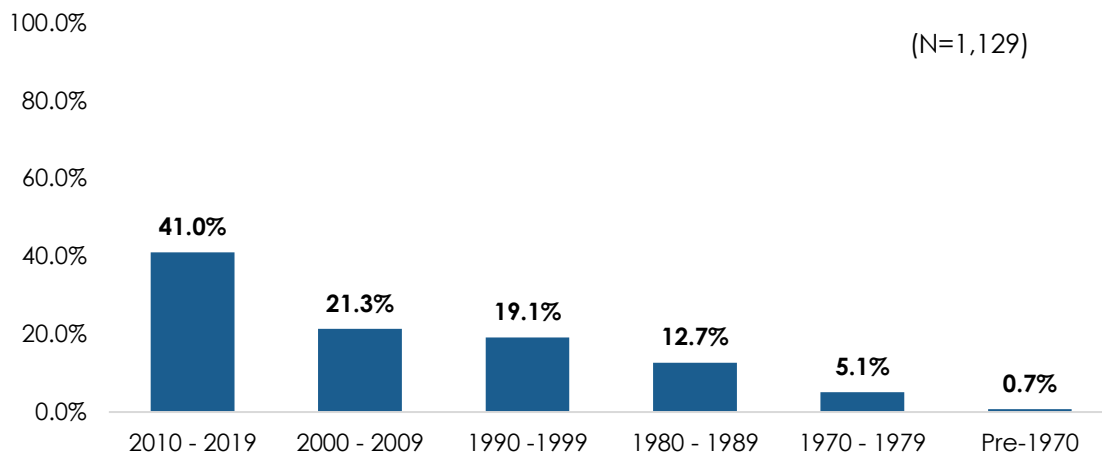
Figure 13. PTs: Highest Degree



⁶ American Physical Therapy Association. (2019, December 1). *Transition DPT FAQs*. Retrieved from <https://www.apta.org/your-career/career-advancement/postprofessional-degree/transition-dpt-faqs>.

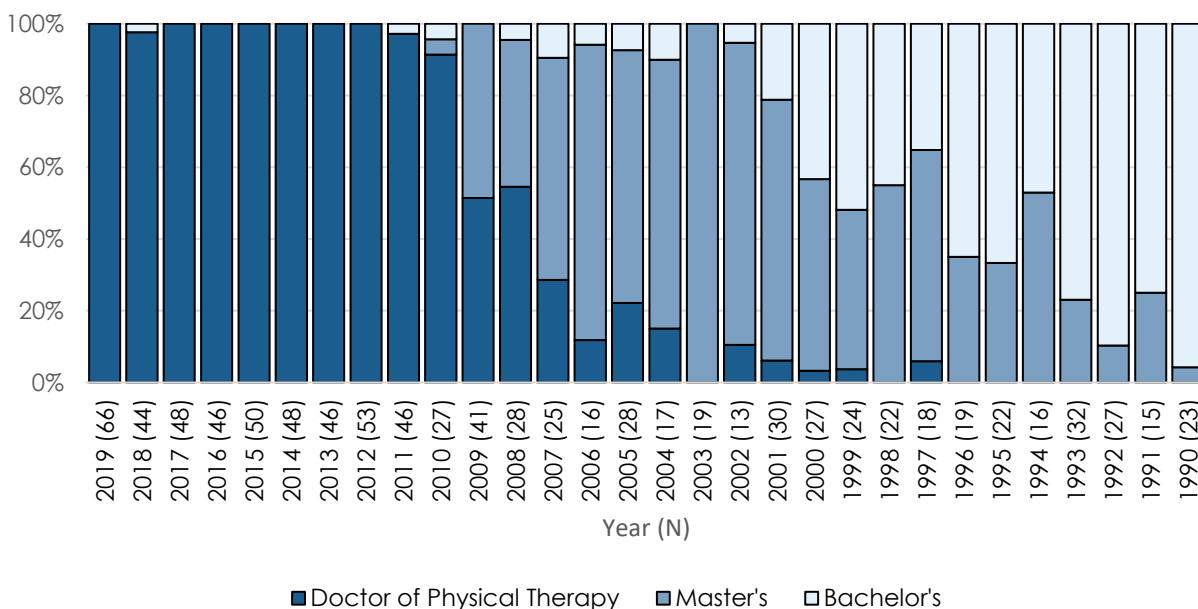
In addition to reporting the types of degrees obtained, PTs were also asked to report the year they had received their degrees. Forty-one percent of PTs received their highest degree in the 2010-2019 decade (Figure 14).

Figure 14. PTs: Highest-Level Degree—Decade Earned



An examination of the types of degree by year shows this shift in degree requirements across the past several decades. The vast majority (98.3%) of PTs who received their highest degree from 2010 – 2019 earned a DPT. (Figure 15).

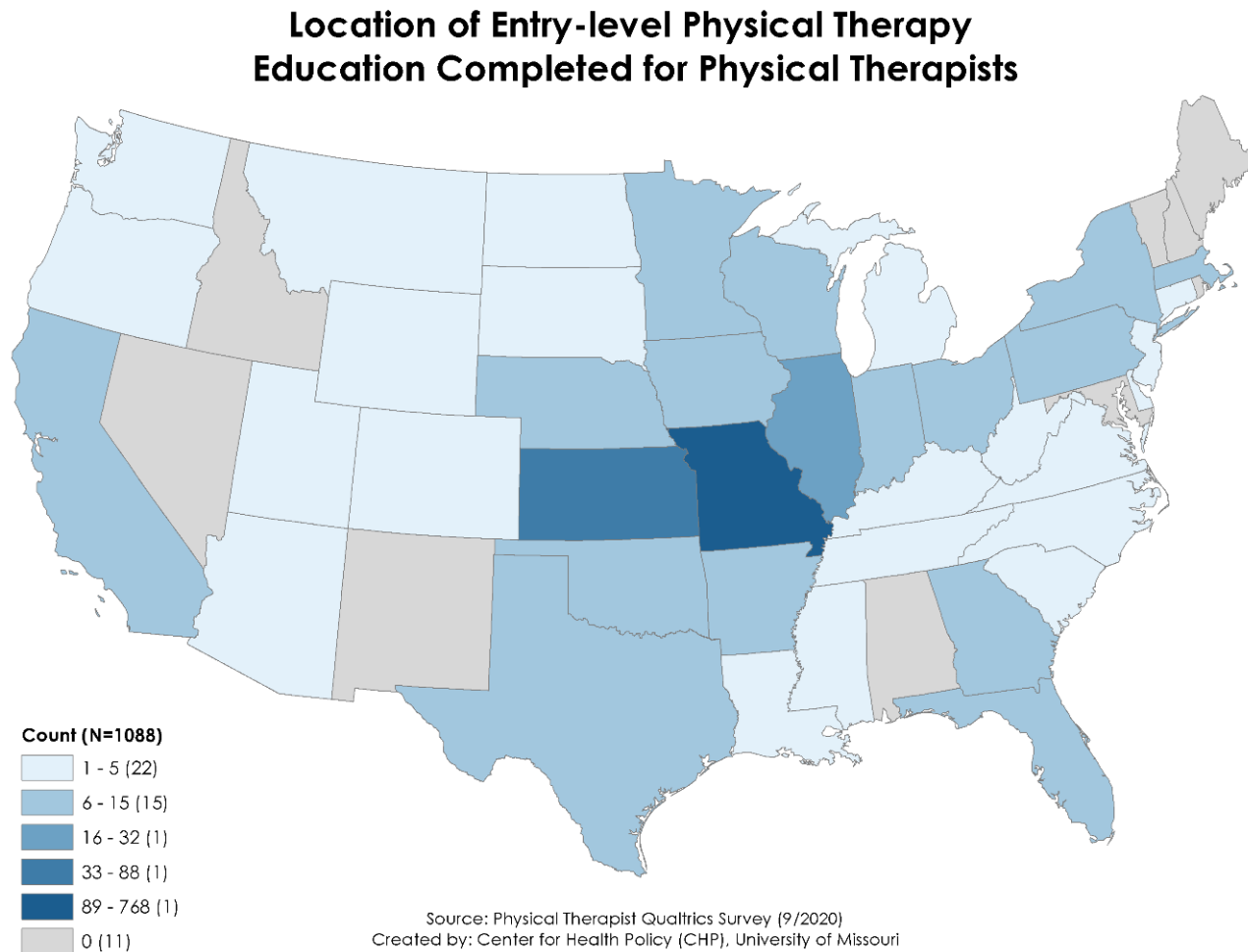
Figure 15. PTs: Type of Advanced Degree by Year (1990-2019)



Note: One respondent reported their highest degree as Associate; this respondent is not included in Figure 15.

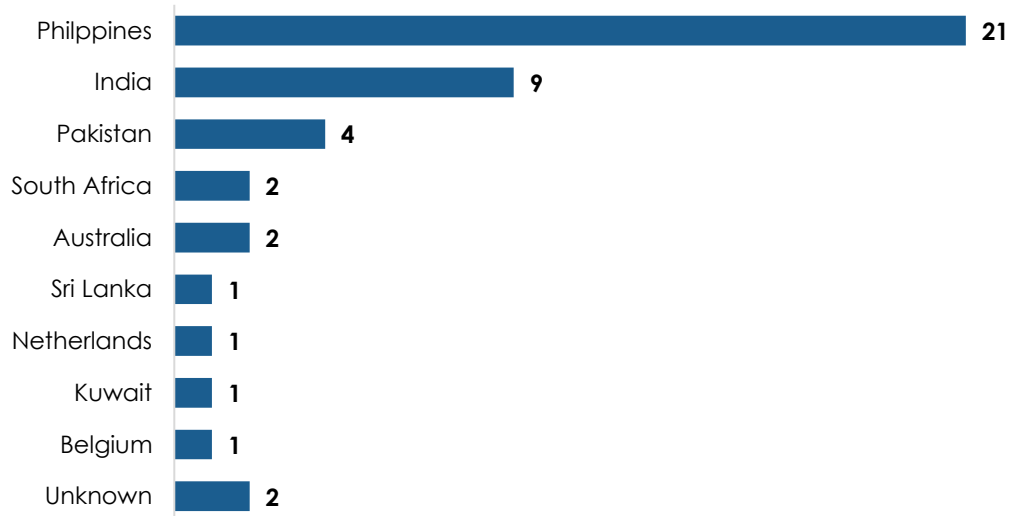
Among PTs who received their entry-level physical therapy degree in the US, most (71%) earned their degree in Missouri, and the remaining 29% of licensed Missouri PTs earned their entry-level degrees from all over the country (Figure 16). Only ten states and Puerto Rico were not selected by survey respondents. Among those PTs not receiving their entry-level degree in Missouri, the most commonly reported states were Kansas (8.0%) and Illinois (2.9%).

Figure 16. PTs: Map of Location of Entry-Level Physical Therapy Degree



Forty-three PTs (3.8%) received their entry-level education outside of the United States, with just under half (46.5%) receiving their degrees in the Philippines (Figure 17).

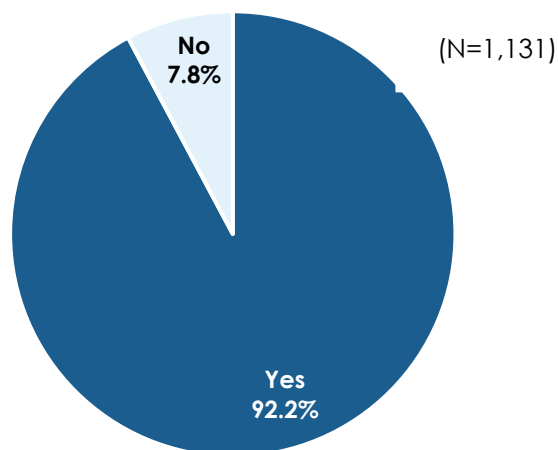
Figure 17. PTs: Physical Therapy Entry-Level Degree (Earned Outside US)



Employment

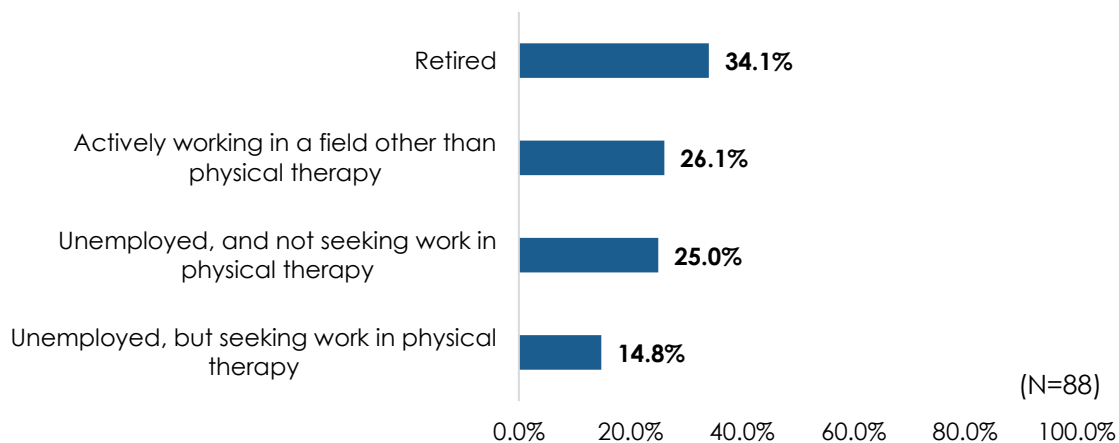
Survey participants were asked if they were currently employed as a physical therapist or physical therapist assistant, including in non-patient care or a non-clinical environment related to physical therapy. Most PTs (92.2%) were currently employed in physical therapy (Figure 18).

Figure 18. PTs: Current Employment in Physical Therapy



Of the 88 PTs who are not currently employed in physical therapy, only 14.8% are unemployed and seeking employment in physical therapy. The remainder are either retired, working in another field, or unemployed and looking for work in another field (Figure 19).

Figure 19. PTs: Employment Situation of Respondents Not Employed in Physical Therapy



About half of all PTs reported working 31-40 hours per week; this was the most commonly reported range. Notably, 25.8% of PTs work 41 or more hours per week (Figure 20). Most of the time PTs spend at work (78%) is in direct patient care (Figure 21).

Figure 20. PTs: Average Total Weekly Hours Worked across all Positions

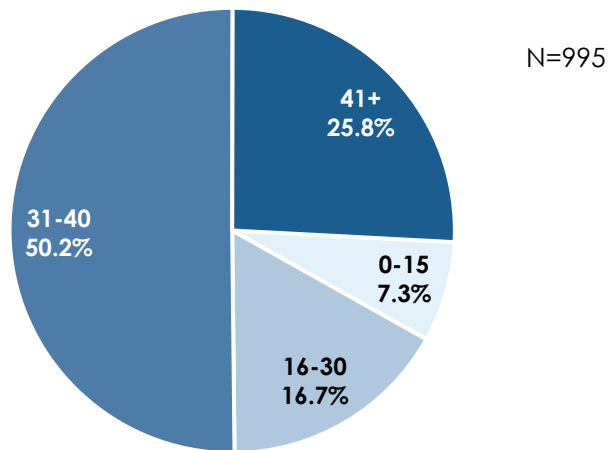
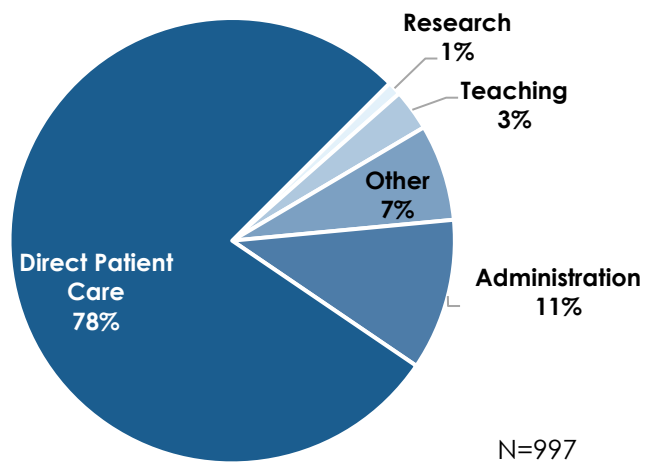
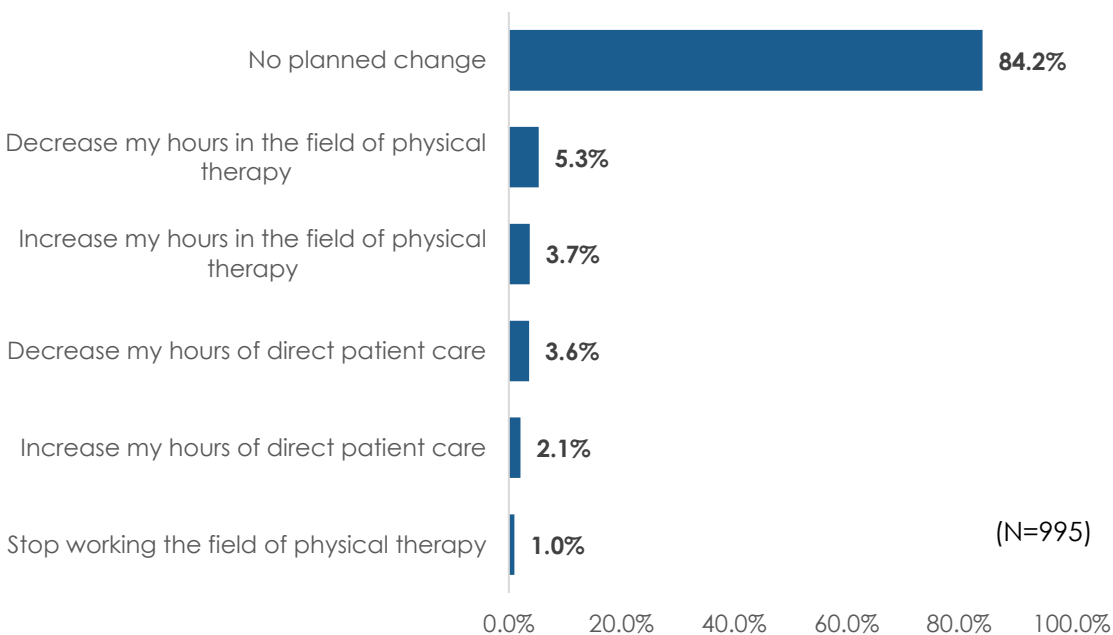


Figure 21. PTs: Percentage of Time Spent in Key Medical Activities



Among those PTs employed in physical therapy at the time of the survey, the majority (84.2%) did not have any planned changes in the next twelve months to their employment situation (Figure 22). PTs are slightly more interested in decreasing their hours than increasing them for both physical therapy work, in general, and direct patient care.

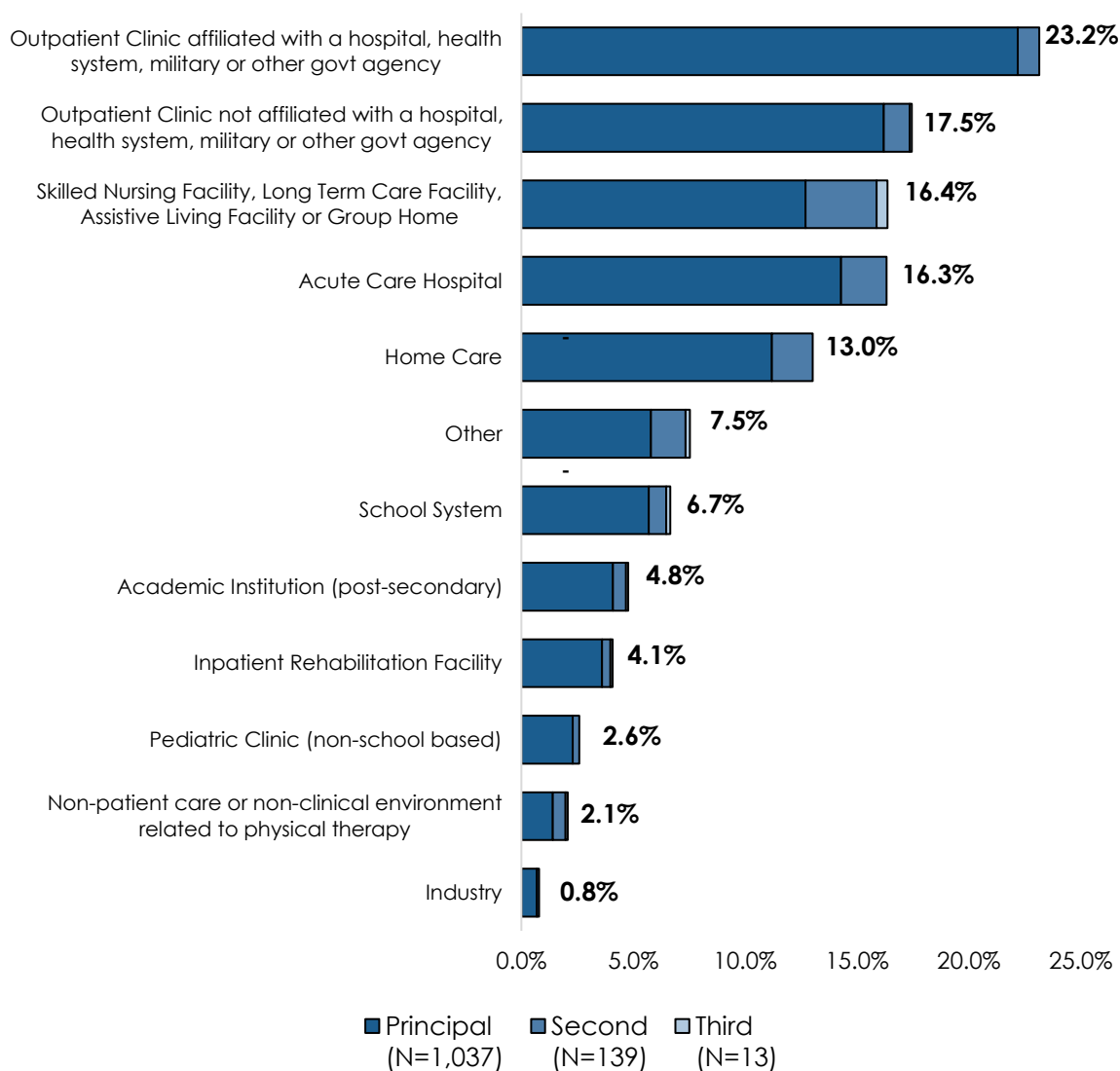
Figure 22. PTs: Employment Plans for the Next Twelve Months



Practice Setting

When asked about their work setting (i.e., the place where they spend the majority of their time), PTs reported providing healthcare across a wide range of settings (Figure 23). PTs worked most often in outpatient clinics, especially those affiliated with a hospital, health system, military, or other government agency.

Figure 23. PTs: Place of Practice/Work



Note: Percentages are calculated from 1,037 PTs; settings are included for all positions worked a minimum of 5 hours per week.

In addition to work settings, PTs were asked if they conducted any clinical work through "Telehealth" or "Telemedicine." Telemedicine is defined on the survey as "the provision of health care services to a patient from a health care provider who is at a site other than where the patient is located using telecommunication technology." Just over 10% of PTs reported they had conducted clinical work using telehealth (Figure 24). However, these data appear to be highly influenced by the onset of the COVID-19 pandemic. When comparing responses from surveys received prior to the World Health Organization (WHO) declaring COVID-19 a global pandemic (March 11, 2020) to those received after this date, the percentage of PTs using telecommunication technology in their clinical work rises dramatically (Figure 25); this pattern has been documented across the healthcare sector.⁷

Figure 24. PTs: Clinical Work Conducted through Telehealth or Telemedicine

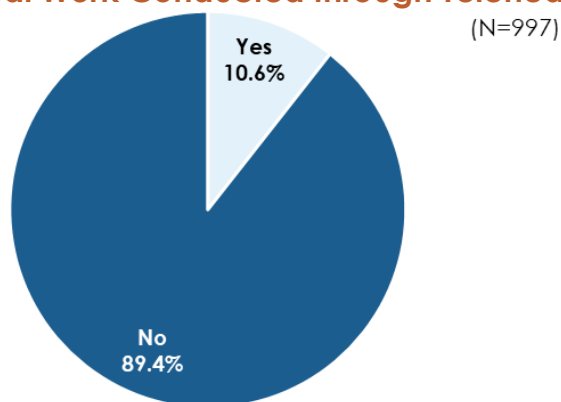
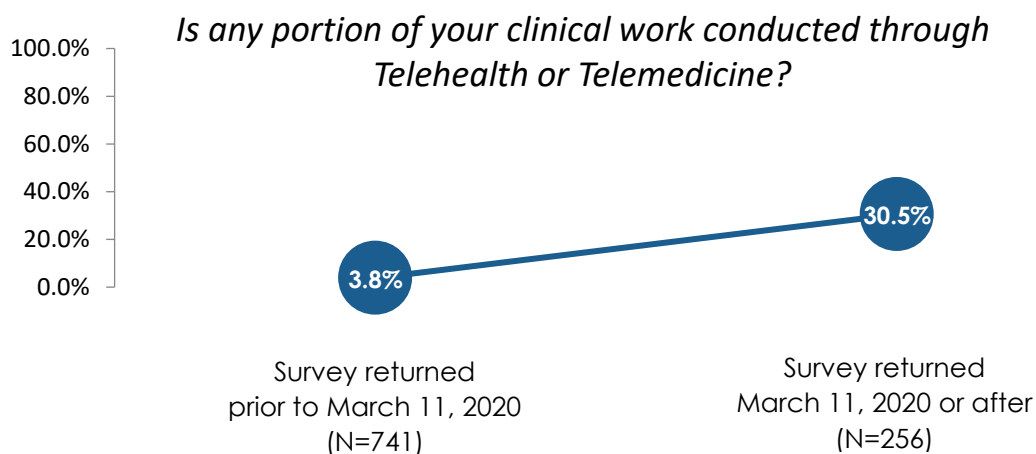


Figure 25: PTs Change in Telehealth and Telemedicine with Covid-19 Pandemic

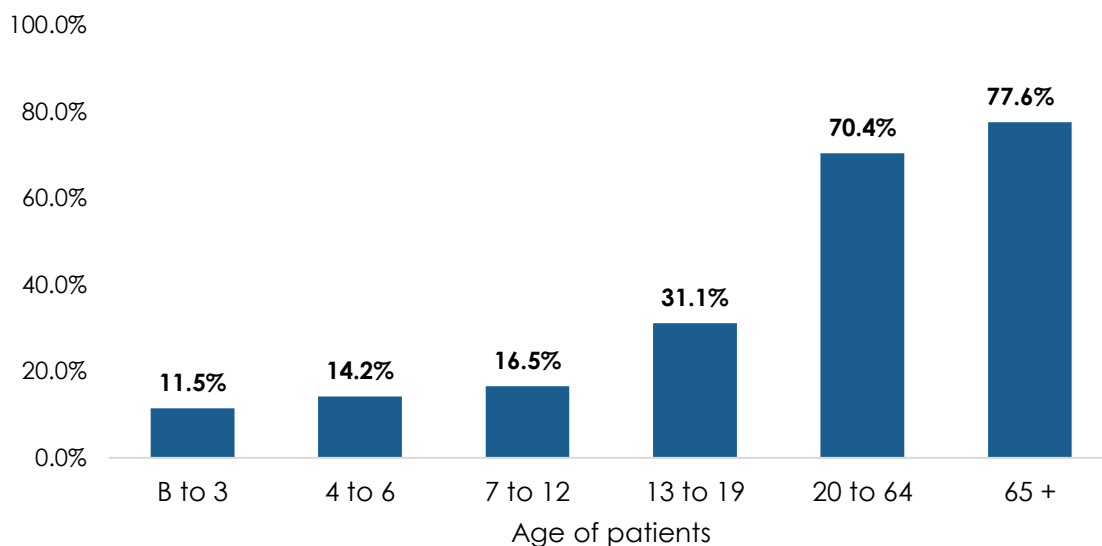


⁷ Wosik, J., Fudim, M., Cameron, B., Gellad, Z.F., Cho, A., Phinney, D., Curtis, S., Roman, M., Poon, E.G., Ferranti, J., Katz, J.N., Tchong, J. (2020). Telehealth transformation: COVID-19 and the rise of virtual care. *Journal of the American Medical Association*, 27(6), 957-962.

Patient Characteristics and Practice Specialties

PTs were asked to select the age range(s) of the populations they work with in their clinical practice/work settings. As shown in Figure 26, PTs who responded to the survey more often work with the senior population than any other group. Although most PTs (77.6%) work with more than one age group, 17.3% selected individuals 65 and older exclusively.

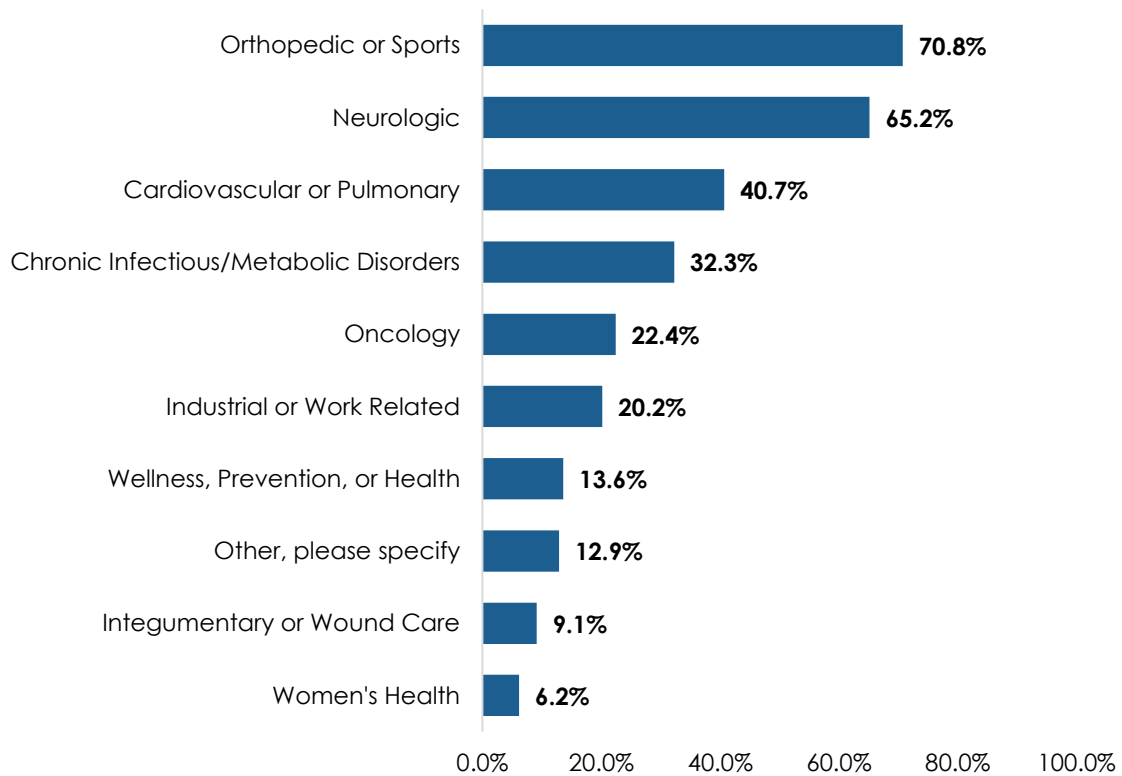
Figure 26. PTs: Age Range of Patients



Note: Respondents could select more than one age range; percentages are calculated from 986 PTs currently working in their field who answered this question; predominant age brackets are included for all settings in which the PT worked a minimum of 5 hours per week.

When asked about the types of conditions or injuries they predominantly treat, the most commonly selected category was orthopedic or sports, followed by neurologic (Figure 27). Most PTs (75.3%) indicated they treated more than one type of condition or injury; however, 12.6% selected orthopedic or sports exclusively and 6.0% selected neurologic exclusively.

Figure 27. PTs: Predominant Types of Injuries or Conditions



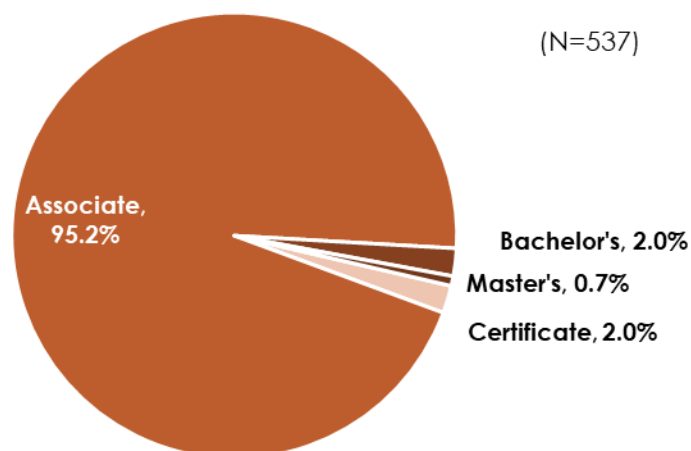
Note: Respondents could select more than one type of injury or condition; percentages are calculated from 985 PTs currently working in their field who answered this question; injuries or conditions are included for all settings in which the PT worked a minimum of 5 hours per week.

Survey Results for Physical Therapist Assistants

Education

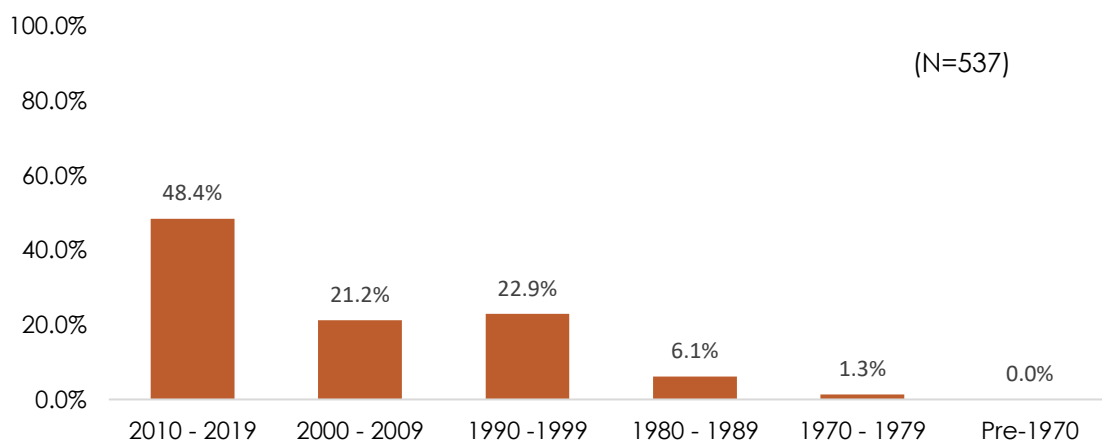
PTAs were asked to report both their entry-level and their highest degree. The vast majority (95.2%) of PTAs entered the field with an Associate degree (Figure 28) and only ten PTAs (1.9%) went on to obtain additional degrees in physical therapy. Of these ten PTAs, most reported receiving a second Associate degree. Only three went on to receive a higher degree; these three PTAs entered the field with an Associate degree and went on to receive a Bachelor's degree.

Figure 28. PTAs: Entry-Level Degree



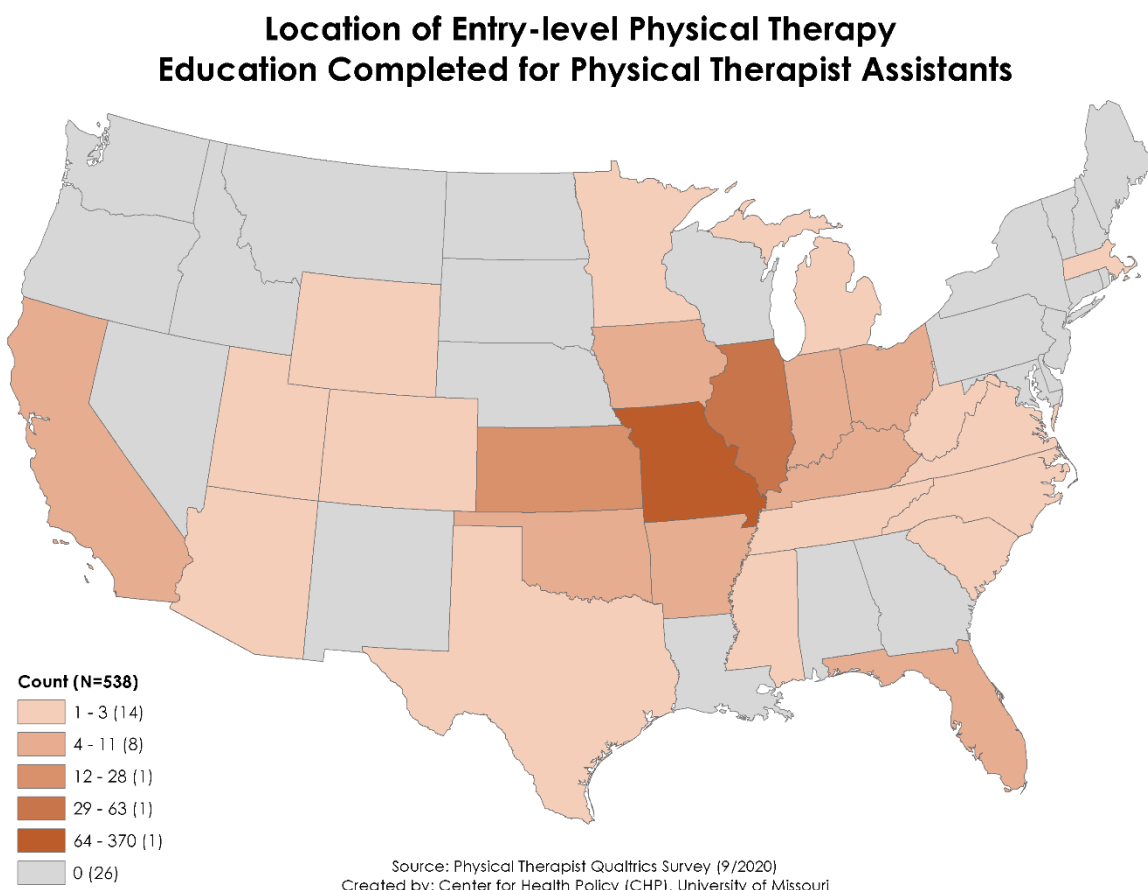
In addition to reporting the types of degrees they had obtained, PTAs were asked to report the year they had received their degrees. Almost half (48.4%) reported having received their degrees in the last ten years (2010-2019) (Figure 29).

Figure 29. PTAs: Highest-Level Degree—Decade Earned



Among PTAs who received their entry-level physical therapy degree in the US, most (69%) earned their degree in Missouri. The remaining 31% of licensed Missouri PTAs earned their entry-level degrees in 24 other states, concentrated primarily in the Central United States (Figure 30). Among those PTAs not receiving their entry-level degree in Missouri, the most commonly reported states were Illinois (11.7%) and Kansas (5.2%).

Figure 30. PTAs: Map of Location of Entry-Level Physical Therapy Degree

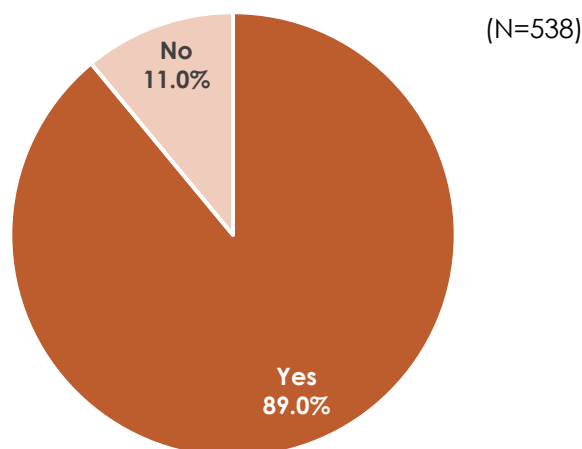


None of the PTAs surveyed received their entry-level degree in a country outside of the United States.

Employment

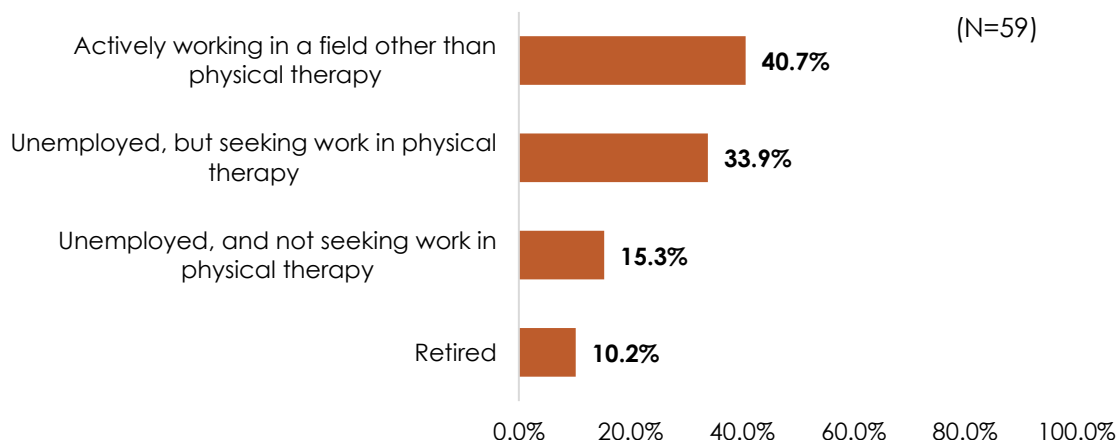
Survey participants were asked if they were currently employed as a physical therapist assistant, including in non-patient care or a non-clinical environment related to physical therapy. Most PTAs (89.0%) were currently employed in physical therapy (Figure 31).

Figure 31. PTAs: Current Employment in Physical Therapy



Of the 59 PTAs who are not currently employed in physical therapy, 40.7% are actively working in a field other than physical therapy. Almost half of PTA respondents not working in the field are unemployed, with 33.9% seeking work in physical therapy and 15.3% not seeking work in physical therapy. (Figure 32).

Figure 32. PTAs: Employment Situation of Respondents Not Employed in Physical Therapy



Most PTAs (57.3%) reported working 31-40 hours per week; this was the most commonly reported range. Although the majority of PTAs work at least 31 hours, part-time employment is fairly common with 28.8% working 30 hours or fewer (Figure 33). Most of the time PTAs spend at work (88%) is in direct patient care (Figure 34).

Figure 33. PTAs: Average Total Weekly Hours Worked across all Positions

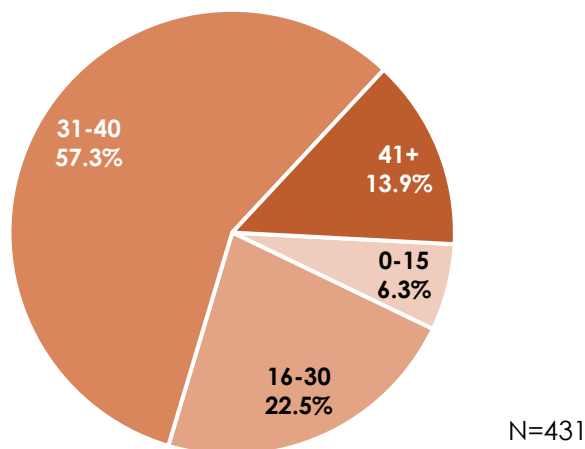
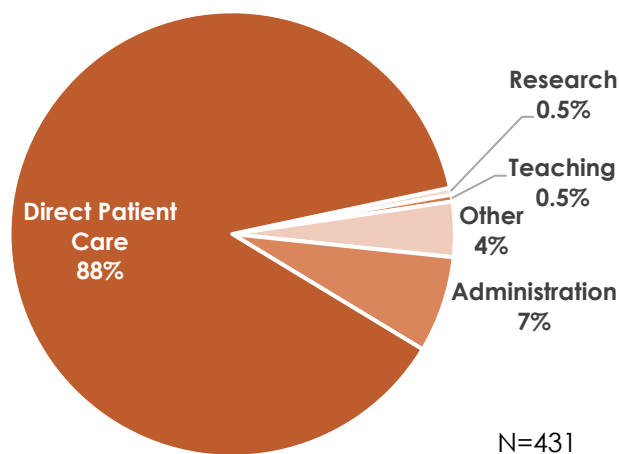
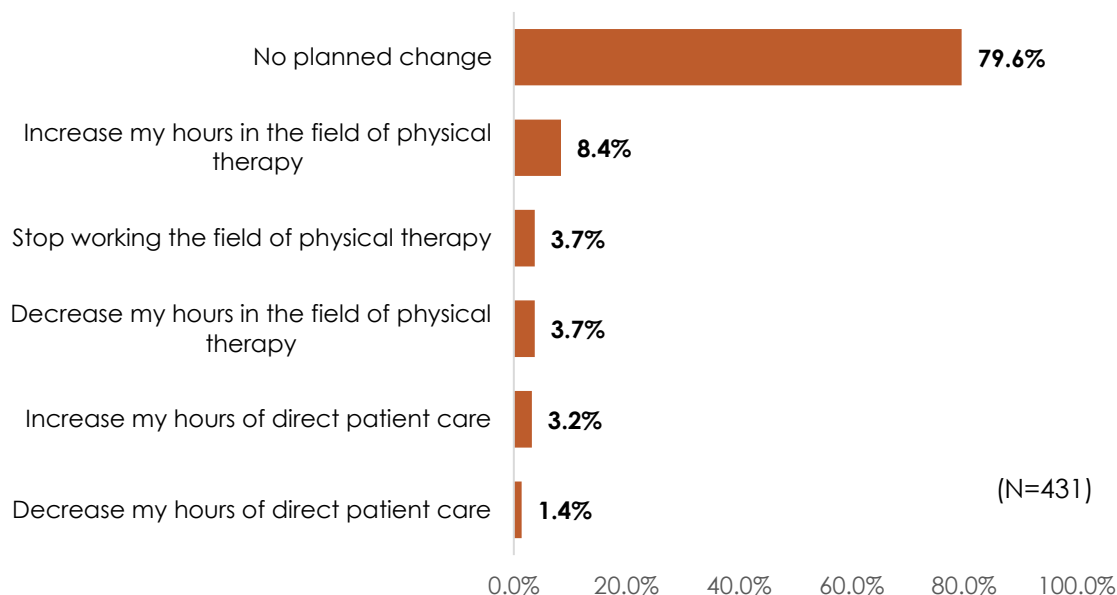


Figure 34. PTAs: Percentage of Time Spent in Key Medical Activities



Among those PTAs who were employed in physical therapy at the time of the survey, the majority (79.6%) did not have any planned changes in the next twelve months to their employment situation (Figure 35). Among those who planned to make changes in employment, 11.6% were interested in either increasing their hours in the field of physical therapy or increasing hours of direct patient care.

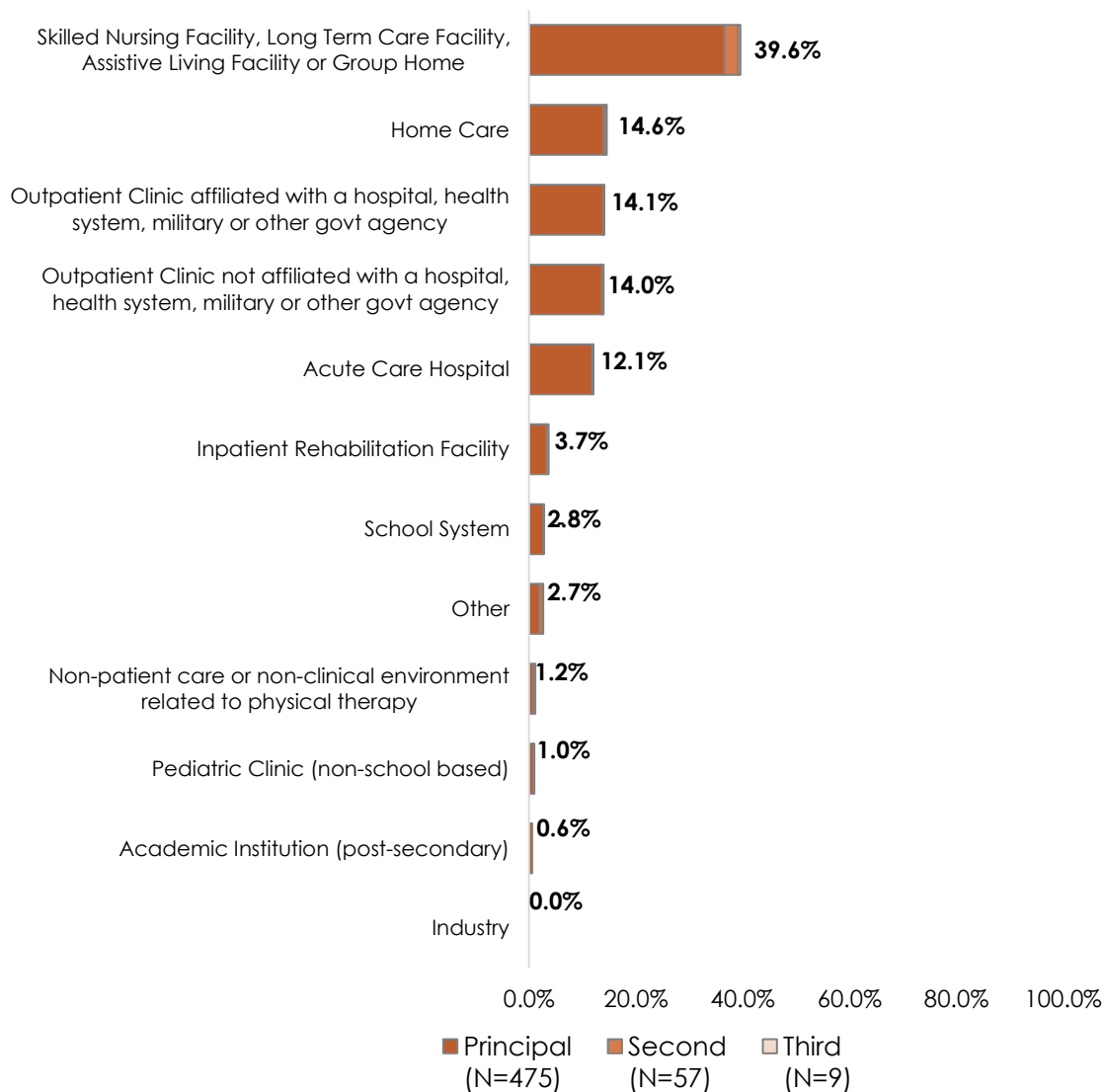
Figure 35. PTAs: Employment Plans for the Next Twelve Months



Practice Setting

When asked about their work setting (i.e., the place where they spend the majority of their time), PTAs most commonly selected the category that includes residential facilities and skilled nursing (Figure 36).

Figure 36. PTAs: Place of Practice/Work



Note: Percentages are calculated from 1,037 PTs; second and third settings are included for all positions worked a minimum of 5 hours per week.

PTAs were also asked if any portion of their clinical work was conducted through "Telehealth" or "Telemedicine." Very few PTAs (2.6%) reported that they had conducted clinical work using telecommunication technology (Figure 37). As was discussed with PTs, these data are influenced by the onset of the COVID-19 pandemic. When we compare responses to this question on surveys received prior to the WHO declaring COVID-19 a global pandemic (March 11, 2020) with those received after this date, the percentage of PTAs using telecommunication technology in their clinical work rises from 0.3% to 9.4% (Figure 25). Although PTAs do not appear to be using telehealth or telemedicine as extensively as PTs, the increase post-COVID-19 is quite substantial.

Figure 37. PTAs: Clinical Work Conducted through Telehealth or Telemedicine

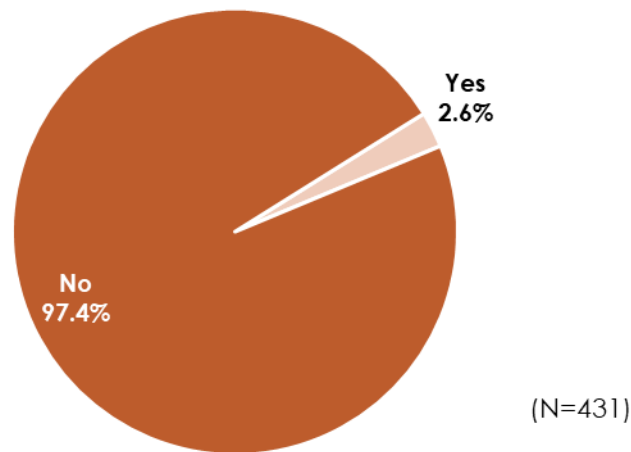
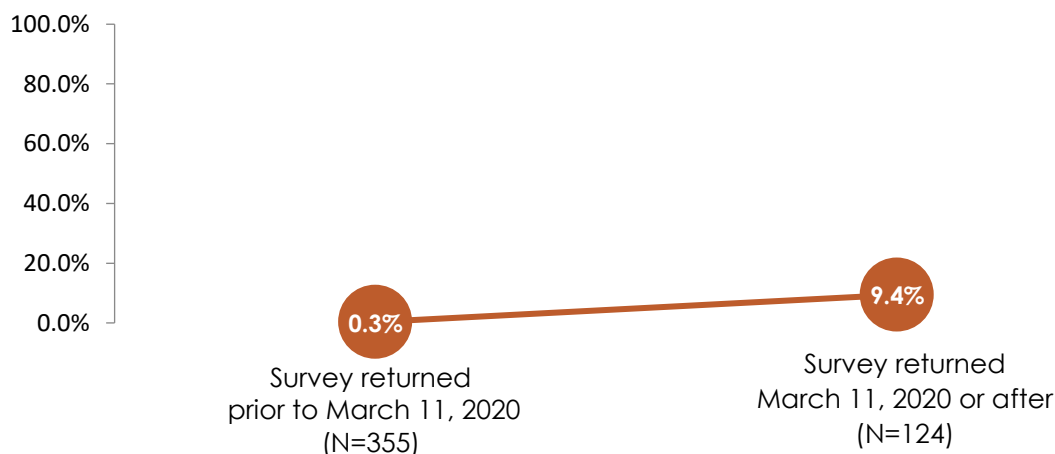


Figure 38. PTAs: Change in Telehealth and Telemedicine with Covid-19 Pandemic

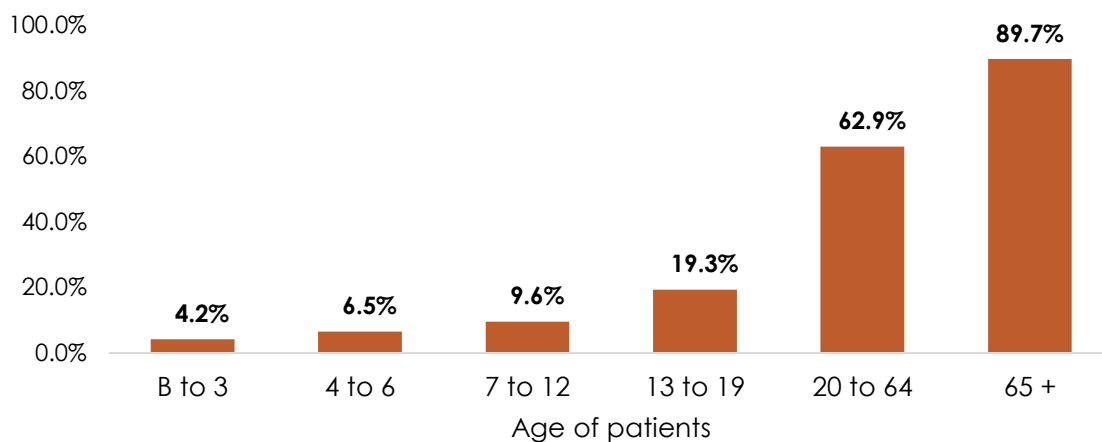
Is any portion of your clinical work conducted through Telehealth or Telemedicine?



Patient Characteristics and Practice Specialties

PTAs were asked to select the age ranges of the populations they work with in their clinical practice/work settings. As shown in Figure 39, 89.7% of PTAs reported serving individuals who are 65 or older. Most PTAs (61.8%) work with more than one age group; however, 32.4% of PTAs reported working exclusively with individuals with 65 and older.

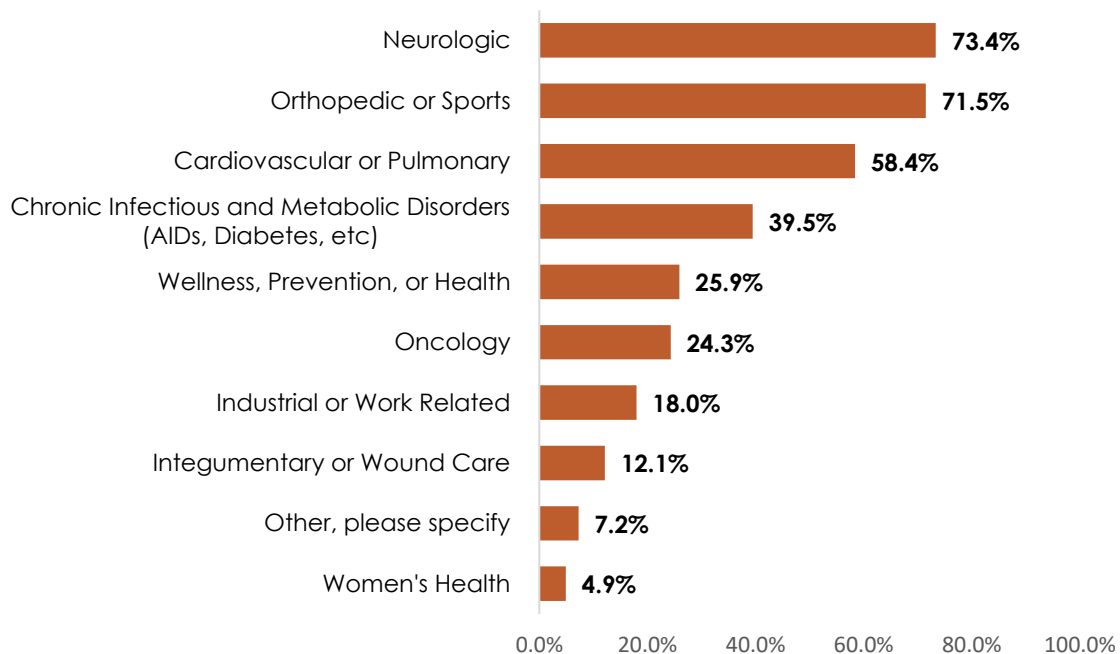
Figure 39. PTAs: Age Range of Patients



Note: Respondents could select more than one age range; percentages are calculated from 429 PTAs currently working in their field who responded to this question; predominant age brackets are included for all settings in which the PT worked a minimum of 5 hours per week.

When asked about the types of conditions or injuries they predominantly treat, the most commonly selected category among PTAs was neurologic, followed closely by orthopedic or sports (Figure 40). Most PTAs (83.9%) indicated that they treated more than one type of condition or injury, with only 7.5% selecting exclusively neurologic and 2.3% selecting exclusively orthopedic or sports.

Figure 40. PTAs: Predominant Types of Injuries or Conditions



Note: Respondents could select more than one type of injury or condition; percentages are calculated from 428 PTAs currently working in their field who answered this question; injuries or conditions are included for all settings in which the PTA worked a minimum of 5 hours per week.

Next Steps

The Missouri State Board of Registration for the Healing Arts and the University of Missouri will continue to collaborate on providing information on the physical therapy workforce in Missouri. As more physical therapists and physical therapist assistants participate in the survey, more robust data will be included in future editions of the report. The Missouri Physical Therapy Workforce Report is part of a larger collaboration on the healthcare workforce in Missouri. Next steps include doing similar analysis for other health care providers within the Missouri State Board of Registration for the Healing Arts, to include physician assistants, anesthesiology assistants, athletic trainers, clinical perfusionists, and speech and language pathologists and audiologists. The University of Missouri currently produces annual reports on the physician and nurse workforces, and will soon expand to other healthcare professions including those providing mental and behavioral healthcare. Data, charts and graphics included in this report will be available through a Missouri healthcare workforce web application, which houses data on a wide variety of healthcare professions.

Appendix

Map Notes

The reference map on page 3 indicates core-based statistical areas (CBSAs), geographic areas defined by the U.S. Office of Management and Budget (OMB). A CBSA includes one or more counties (or county-equivalents like the City of St. Louis) anchored by an urban center plus the adjacent counties that are socioeconomically tied to the urban center by commuting. Metropolitan areas, shown with the darkest blue on the reference map, have an urban center with more than 50,000 residents. Micropolitan areas have an urban center between 10,000-50,000 residents and are designated with medium blue shading on the reference map. For the purposes of this report, counties without a CBSA are defined as rural, and have a light blue background on the maps.

The remaining maps included in this report group data into 5 categories, known as quintiles, to show PT/PTA survey response rates and distribution at the county level. Counties with no shading or lighter shading have lower response rates or rates of PTs/PTAs per 10,000 residents; counties with darker shading have higher rates.

PTs/PTAs per 10,000 residents is a ratio that norms for population density at the county level. While many Missouri counties have fewer than 10,000 residents, this ratio allows comparisons among counties with different populations, much like “percent” ratios (i.e. “per 100”).

Quintiles are created using the Jenks Natural Breaks method within ArcGIS Pro mapping software. This method uses an algorithm to create quintiles that best group similar values in the Merged dataset and maximize the differences between quintiles.

Physical Therapy Minimum Dataset Survey - 2019/2020

Section 1: Demographics

Sex

- ☐ Male
- ☐ Female
- ☐ Prefer to self-describe (please specify): _____
- ☐ Prefer not to answer

Which of the following best describes your race? You may select more than one.

- ☐ White
- ☐ Black or African American
- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Native Hawaiian or Pacific Islander
- ☐ Other (please specify): _____

Are you Hispanic, Latino/a, or of Spanish origin?

- ☐ Yes
- ☐ No

If 'yes', please check all that apply:

- ☐ Mexican, Mexican American, Chicano/a
- ☐ Puerto Rican
- ☐ Cuban
- ☐ Another Hispanic, Latino/a, or of Spanish origin (specify): _____

Section 2: Licensure and Education

Which license or certification do you hold?

- ☐ Physical Therapist
- ☐ Physical Therapist Assistant
- ☐ Both

What is your entry-level physical therapy degree?

- ☐ Certificate
- ☐ Associate
- ☐ Bachelors
- ☐ Masters
- ☐ Doctor of Physical Therapy

In which year did you earn your entry-level physical therapist or physical therapist assistant degree?

▼ 2019 ... 1900

Did you complete your entry-level physical therapist or physical therapist assistant education in the United States?

☐ Yes

☐ No

In which state did you receive your entry-level physical therapist or physical therapist assistant education?

▼ Alabama ... Wyoming

In which country did you receive your entry-level physical therapist or physical therapist assistant education?

▼ Afghanistan ... Zimbabwe

Have you obtained other degrees in physical therapy?

☐ Yes

☐ No

What is your highest-level physical therapy degree?

☐ Certificate

☐ Associate

☐ Bachelors

☐ Masters

☐ Doctor of Physical Therapy

In which year did you earn your highest-level physical therapist or physical therapist assistant degree?

▼ 2019 ... 1900

Did you complete your highest-level physical therapist or physical therapist assistant education in the United States?

☐ Yes

☐ No

In which state did you receive your highest-level physical therapist or physical therapist assistant education?

▼ Alabama ... Wyoming

In which country did you receive your highest-level physical therapist or physical therapist assistant education?

▼ Afghanistan ... Zimbabwe

Section 3: Physical Therapy Employment Status

Are you currently employed as a physical therapist or physical therapist assistant?
This includes non-patient care or a non-clinical environment related to physical therapy.

☐ Yes

☐ No

Select the option that best describes your current employment situation.

☐ Actively working in a field other than physical therapy

☐ Unemployed, but seeking work in physical therapy

☐ Unemployed, and not seeking work in physical therapy

☐ Retired

Section 4: Place of Practice/Work

In which of the following areas is your PRIMARY place of practice/work? Your Primary place of practice/work is where you spend the majority of your time. Select just one.

- ☐ Academic Institution (post secondary)
- ☐ Acute Care Hospital
- ☐ Home Care
- ☐ Inpatient Rehabilitation Facility
- ☐ Industry
- ☐ Non-patient care or non-clinical environment related to physical therapy (law, governmental or regulatory, medical sales, product development, public health, publishing, etc)
- ☐ Outpatient Clinic affiliated with a hospital, health system,, military or other government agency
- ☐ Outpatient Clinic not affiliated with a hospital, health system, military or other government agency
- ☐ Pediatric Clinic (non-school based)
- ☐ Skilled Nursing Facility, Long Term Care Facility, Assistive Living Facility or Group Home
- ☐ School System
- ☐ Other, please specify: _____

What is the zip code where your PRIMARY place of practice/work is located? _____

Do you have a SECONDARY place of employment?

☐ No

☐ Yes

In which of the following areas is your SECONDARY place of practice/work?

☐ Academic Institution (post secondary)

☐ Acute Care Hospital

☐ Home Care

☐ Inpatient Rehabilitation Facility

☐ Industry

☐ Non-patient care or non-clinical environment related to physical therapy

☐ (law, governmental or regulatory, medical sales, product development, public health, publishing, etc)

☐ Outpatient Clinic affiliated with a hospital, health system,, military or other government agency

☐ Outpatient Clinic not affiliated with a hospital, health system, military or other government agency

☐ Pediatric Clinic (non-school based)

☐ Skilled Nursing Facility, Long Term Care Facility, Assistive Living Facility or Group Home

☐ School System

☐ Other, please specify: _____

What is the zip code where your SECONDARY place of practice/work is located? _____

Do you have a THIRD place of employment?

☐ No

☐ Yes

In which of the following areas is your TERTIARY place of practice/work?

☐ Academic Institution (post secondary)

☐ Acute Care Hospital

☐ Home Care

☐ Inpatient Rehabilitation Facility

☐ Industry

☐ Non-patient care or non-clinical environment related to physical therapy

☐ (law, governmental or regulatory, medical sales, product development, public health, publishing, etc)

☐ Outpatient Clinic affiliated with a hospital, health system,, military or other government agency

☐ Outpatient Clinic not affiliated with a hospital, health system, military or other government agency

☐ Pediatric Clinic (non-school based)

☐ Skilled Nursing Facility, Long Term Care Facility, Assistive Living Facility or Group Home

☐ School System

☐ Other, please specify: _____

What is the zip code where your TERTIARY place of practice/work is located? _____

Section 5: Practice/Work Characteristics

How would you characterize your current employment status? (select just one)

- ☐ Self-employed
- ☐ Employed
- ☐ Combination of self-employed and employed
- ☐ Unemployed

Is any portion of your clinical work conducted through "Telehealth" or "Telemedicine"?

Telemedicine is the provision of health care services to a patient from a health care provider who is at a site other than where the patient is located using telecommunication technology.

- ☐ Yes
- ☐ No

What age ranges do you predominately work within your clinical practice/work setting? Check all that apply, but only if you see that population group on a regular basis (age ranges are approximate).

	Primary	Secondary	Tertiary
Infants & Toddlers (Birth - 3 years)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Early Childhood (4-6 years)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Middle-late Childhood (7-12 years)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adolescence (13-19 years)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adult (20-64 years)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geriatrics (65+ years)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Which of the following types of injuries or conditions do you predominately see in your clinical practice/work setting? Check all that apply, but only if you see that population group on a regular basis.

	Primary	Secondary	Tertiary
Orthopedic or Sports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neurologic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oncology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Women's Health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cardiovascular or Pulmonary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial or Work Related	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Integumentary or Wound Care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wellness, Prevention, or Health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chronic Infectious and Metabolic Disorders (AIDs, Diabetes, etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

On average, how many total hours per week do you work in the field of physical therapy (clinical and non-clinical) for your practice/work settings (include per diem work)?

Primary Practice/Work : _____

Secondary Practice/Work : _____

Tertiary Practice/Work : _____

Total : _____

What PERCENTAGE of your time working do you spend in each of the following categories?
Make sure that the amount of time from all categories equal 100%.

Direct Patient Care : _____

Teaching in an Academic PT or PTA program : _____

Administration : _____

Research : _____

Other : _____

Total : _____

How many weeks per year do you typically work, including direct patient care and non-patient care such as administration, research or teaching?

Do not include paid time off. Make sure that the amount of time from all practice/work settings does not exceed 52.

_____ Primary Practice/Work

_____ Secondary Practice/Work

_____ Tertiary Practice/Work

What are your employment plans for the next 12 months?

- ☐ No planned change
- ☐ Increase my hours in the field of physical therapy
- ☐ Decrease my hours in the field of physical therapy
- ☐ Increase my hours of direct patient care
- ☐ Decrease my hours of direct patient care
- ☐ Stop working the field of physical therapy